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PROPERTY FILE

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PROSPECTAS

MINERALE EXPLORATEDAS

LIVITED

# REPORT ON ETTA GROUP

## PORCHER ISLAND, SKEENA M.D.

### INTRODUCTION:

This property was examined at the request of R. McBean for the account of Yukonadian Mines Ltd. of Vancouver, B.C., with office at #214-575 Georgia St. W. The examination was made on Saturday, August 16th, and Sunday, August 17th. Three additional days were involved in getting to, and returning from Porcher Island: Time being lost because of adverse weather conditions.

#### PROPERTY:

The original Etta Group consists of 36 claims: to Etta #36. Record numbers 34039 to 34074, staked in April, 1969, and recorded in Prince Rupert on May 9th, 1969. They form a square block of 6 claims to the side, and are staked as 3 double rows, with the location lines running about north 10 degrees west. The central row of 2 claims has been extended an additional 4,500 feet to the south, and crosses a road presently under construction by Columbia Cellulose, for the purpose of logging off a stand of very mature timber. The center of the main group would lie about 2 miles due south of Hunt Point, the extreme northerly point of Porcher Island. western boundary of the claims roughly parallel the eastern shore of Hunt Inlet which is locally known as Jap Inlet, which provides a safe anchorage for deep sea vessels. It has been described as one of the safest, and best sheltered harbors in Northern British Columbia, with deep water and good anchorage. A fairly good trail leads from the south-west corner of Claim Two, to the showings on Claims 5 and 6.

# ACCESSIBILITY:

At the present time, the claims can be serviced, either by float plane or by boat, out of Prince Rupert, 20 miles to the north-east of Hunts Inlet at the Etta #1 claim.

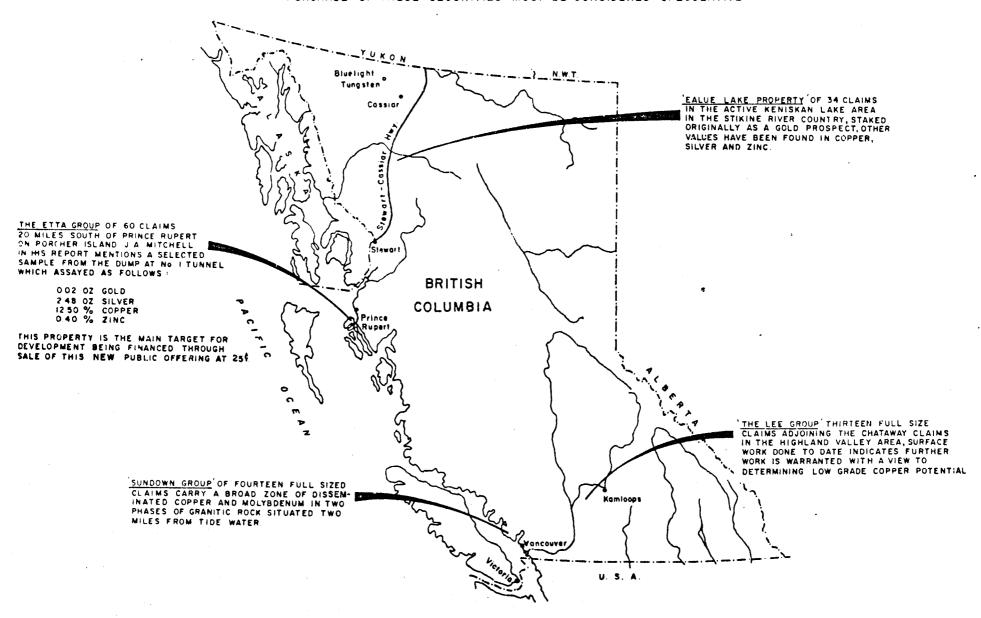
### PHYSIOGRAPHY:

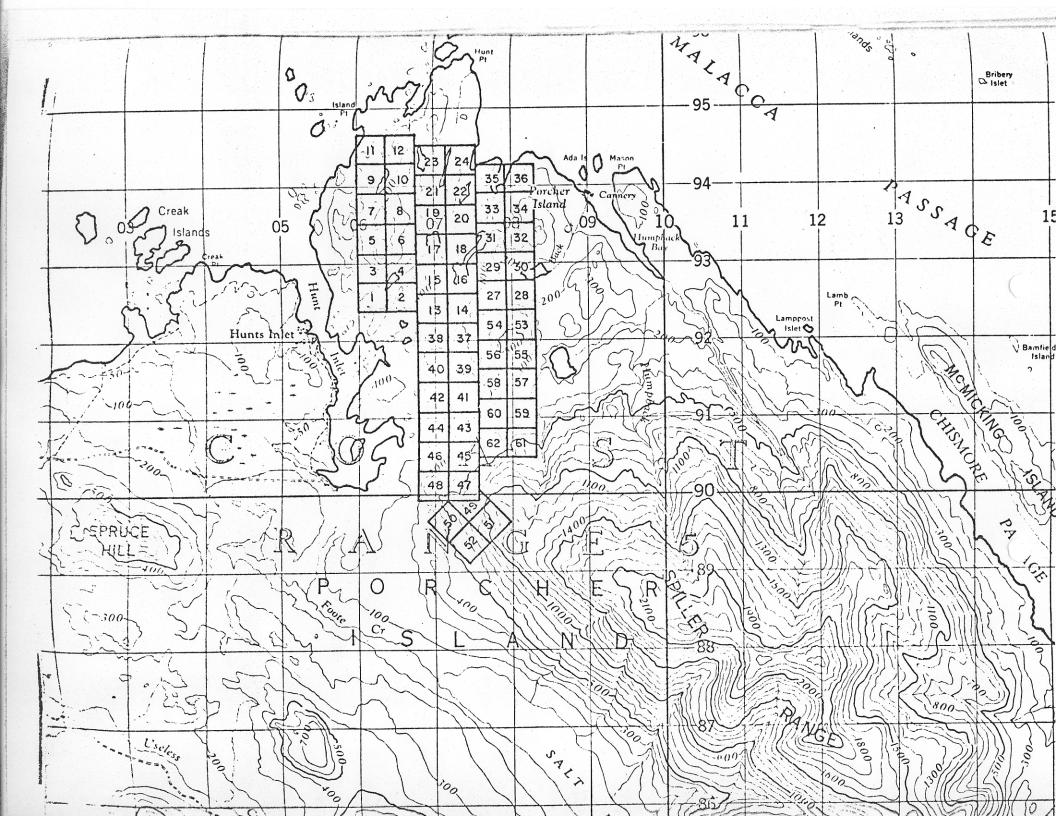
The claim area at the north end of Porcher Island is generally low lying. In this area the timber is often stunted and twisted, and there is very little of commercial value. Further south the claim group, and on higher ground the timber is mature, and is about to be logged off.

# PROPERTIES

# YUKONADIAN MINERAL EXPLORATIONS LTD.

PURCHASE OF THESE SECURITIES MUST BE CONSIDERED SPECULATIVE





Precipitation is moderately heavy, but the temperature is such that very little falls as snow. Thus it is possible to work on the Island during any part of the year.

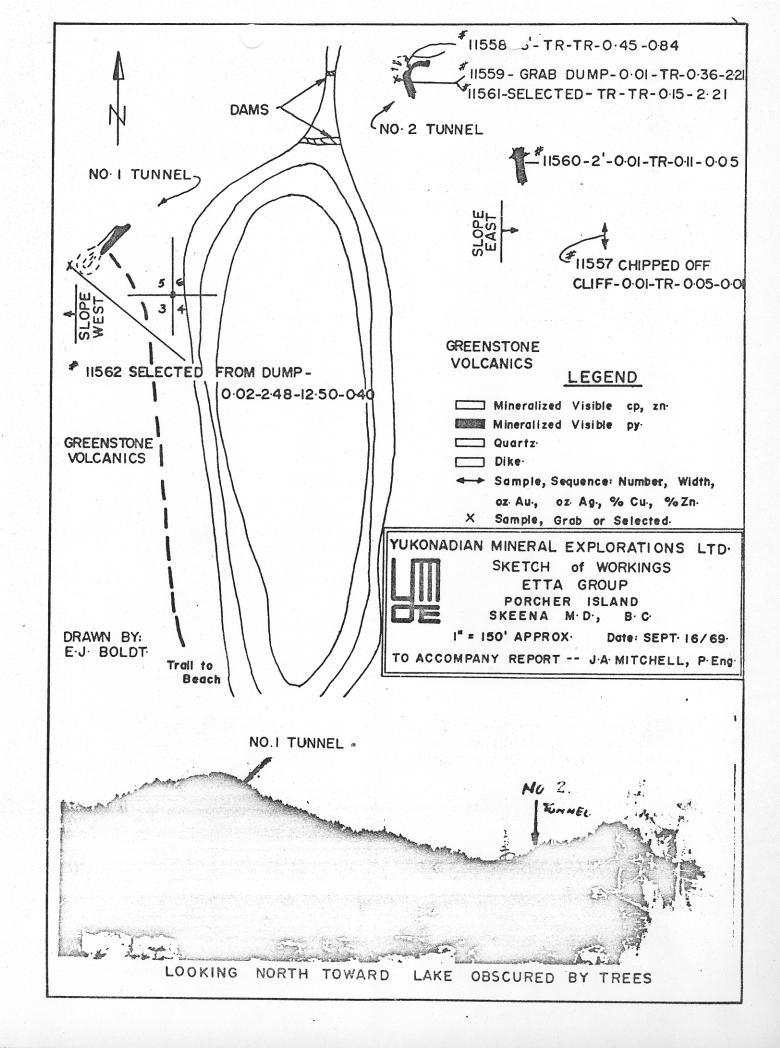
Hunt Lagoon is nowhere less than 18 feet deep, but there is a central channel at least 60 feet deep. The largest ships could anchor in the widest part of the inlet towards the north end and entrance would be well sheltered from the prevailing winds. It is one of the few such harbors on the Islands in this part of the coast.

### GEOLOGY AND MINERALIZATION:

The claims are underlain for the most part by metamorphosed volcanics and sediments on the western flank of the Coast Range Batholith and these rocks are intruded by a complexity of dikes, sills and stocks. They are schisted and brecciated and generally altered by both dynamic and hydrothermal action, so it is not surprising that metallic sulphides generally of high temperature origin have been found in various places in these rocks.

The Edye Pass and Surf Point Mines were operated on gold quartz veins in the intrusive quartz diorite. A similar intrusive and similar positioning with respect to the intrusive occurs in the south-east corner of the claim block. This is the core of the Spiller Mountains. A logging road is presently approaching this area from Hunt Inlet. It should add greatly to the geological information available. Considerable pyrite has been found in tongues of intrusives along the portion of the road, as far completed, and one very fine grained crystaline intrusive very white in color, and banded, shows considerable magnetite and minute cyrstals of pyrite. So far, no mineralized quartz veins have been exposed.

Old Minister of Mines' reports, list five properties in the vicinity of Hunt Inlet. These are the Bald Mt. Group and Jitney Group. It is believed, that the Etta group of claims covers the same mineral occurrences as the Jitney Group. The 1917 report on the Jitney Group, refers to two tunnels, one about 3 mile from the beach, and the other location, not given, but apparently close by. The first tunnel is reported to be in argillites, and follows a vein one foot wide, of almost solid chalcopyrite. Four tons shipped to Anyox, game net returns of \$500.00. In that year copper was about 25¢ a pound. Hence, this shipment represented almost solid chalcopyrite, running about 25% copper, or there are higher tenor sulphides along with the chalcopyrite. These tunnels could



not be found, but two other tunnels were seen on either side of a small lake formed by beaver dams, about a mile from the beach.

DESCRIPTION OF THE WORKINGS:

### Tunnel # 1

This tunnel is about 20 feet long, and follows a north-easterly striking fissure in altered andesite or greenstone alongside a granitic dike. The fissure is irregular, being slightly displaced at intervals, but in places is mineralized with almost solid chalcopyrite across a few inches associated with considerable epidote. Short drill holes had been drilled below and beyond the tunnel, but there was little evidence of copper in any of the core. A winkie drill was still on the property and appeared to be in excellent condition. It would not be surprising if this particular vein was discontinuous, but there may be others similar or better. A selected sample off the dump assayed:

0.02 ounces Gold
2.48 ounces Silver
12.50 % Copper
0.40 % Zinc

Old powder at this site was dated 1917 and 1937. About 400 feet to the east, on the opposite side of the lake, and opposite a beaver dam at its north end, there is another tunnel of about the same length. This follows massive pyrrhotite with some chalcopyrite in a southeasterly direction. A north-south vein-shear crosses the portal of this adit, and there is a parallel vein-shear about 60 feet up hill from the portal. Both shears are narrow; the upper, being about 2 feet, and the lower about ½ that width. The upper assayed:

0.01 ounces Gold
 trace Silver
0.11 % Copper
0.05 % Zinc

It carried considerable pyrite, that is probably related to the massive sulphides, which appear to replace the greenstone. A sample across about 7 feet of this replacement material assayed:

trace Gold trace Silver 0.45 % Copper 0.84 % Zinc It appeared to contain more copper than the assay indicates. It was difficult to sample, being highly silicified, and over water. The full width was not exposed, and it deserves further investigation. A general grab sample from the dump assayed:

0.01 ounces Gold trace Silver 0.36 % Copper 2.21 % Zinc

With water about 25 feet immediately below, and stored by the beaver dam, it occurs to the writer that a high pressure pump could be used to advantage, to hydraulic off the overburden in this area, to expose the surface expression of this mineralization and throw further light on the relationship between the north-south striking zones, and the northwest-southeast striking zones, and on their degree of continuity. Mineralization was reported in other trenches, but time did not permit searching for these, and it is very likely that such mineralization does occur. One barren looking quartz vein, that was found by stripping the moss off a cliff face, assayed:

0.01 ounces Gold trace Silver 0.05 % Copper 0.01 % Zinc

The mineralization was all high temperature. Because of reported activity and a variety of intrusions, there is a possibility of finding substantial concentrations of metallic minerals of sufficiently high tenor to constitute ore.

In paper 66 - 33, Prince Rupert, and Skeena map area, Dr. W.A. Hutchinson of the Geological Survey of Canada, suggests that the most likely targets for base metal exploration would be the low grade metamorphic rocks of Porcher, Dundas, and Dunire Islands, and that in these areas, particular attention should be paid to the greenstones, and green schists, and the plutonic rocks that intrude there. The Etta group is in such a setting, and very limited work has revealed the presence of base metal minerals.

# CONCLUSIONS AND RECOMMENDATION:

It is concluded from the mineralization seen, and the geological environment, that the property warrants a magnetometric survey at least. There appears to be magnetite associated with any mineralization seen, and it therefore seems reasonable that any appreciable amount of such mineralization

will respond to a magnetic survey.

The strike of any mineralization seen is either a little west, or a little east of north. Base lines can therefore be run about north-south, using the claim lines where possible, and cross lines run east-west at three hundred foot intervals. Recorded readings should then be taken along these lines at 100 foot intervals, and the results contoured. Because of the probability of magnetic storms, a control magnetometer at a fixed point, should be read at frequent intervals, and the line reading connected accordingly.

With the grid flagged, however, regardless of whether extensive magnetic anomalies have been found, it might be desirable to find continuous conductor veins of chalcopyrite of grades similar to that quoted above from the 1917 report on the Jitney group. This could be done with an electromagnetic survey.

In the event that anomalous areas of important dimensions are found by above work, they may be checked further by soil sampling or induced polarization surveys, but in the final analysis, they will require bulldozing or diamond drilling. At that time, the amount of such work needed, would be determined, and a further estimate of expenditures made.

### ESTIMATE OF COSTS:

A five man crew would be sufficient to flag out the lines, establish stations every hundred feet, and take magnetometer readings. In this terrain, it should be possible to do 10,000 feet per day. A trained technician and helper, would cost about \$100.00 a day for salaries. Travel expenses, camp expenses and fringe benefits, would collectively cost about \$50.00 a day, on a 35 day program, the five required to run the 350,000 line feet involved 42 claims. The total cost of the initial survey would therefore be about:

	\$ 5,250.00
Data Processing would cost	1,000.00
Total:	6,250.00

An E.M. Survey, using the same ground would vary somewhat, according to the method employed, but should not cost over \$200.00 per line mile at most. about:

12,000.00

Diamond drilling with a Winkie drill, now on the property, should not cost over:

5.00 ft.

Allowance can be made for about 2000 feet, to be done on known showings, and on possible anomalies allow:

10,000.00

Deeper drilling will cost a minimum of \$ 10.00 a foot overall, and would depend on the results of the preliminary drilling, but provisions should be made for a minimum of 2000 feet.

Stripping by high pressure pump allow 20,000.00 3,000.00

Before a bulldozer is brought to the island, a major program of bulldozing should be in sight, otherwise, considerable standby costs may be incurred. If possible, a bulldozer, now employed in road building, off the south end of the claims, should be engaged, and a cat road cut through the claims, from the logging road.

Allow:		5,000.00
where possible	geological mapping Allow: travel & communications Allow:	2,000.00 2,000.00 2,000.00
Total estimated	expenditures	62,250.00
Contingencies	15%	9,375.00
Total:		\$ 71,625.00
Say:		\$ 72,000.00

"J. A. MITCHELL"

"SEAL"