

180-#295-# 8069

GEOLOGICAL REPORT

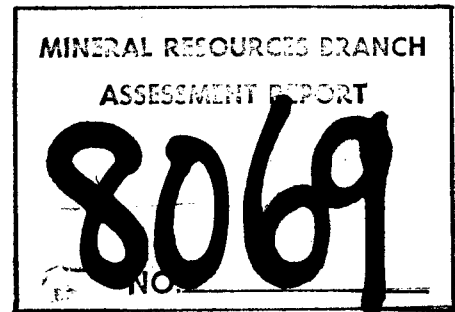
ON THE

PATO CLAIM (8 UNITS);

NANAIMO MINING DIVISION, B.C.

FOR

TALLY RESOURCES LTD.



Vancouver, B.C.

R.H.D. Philp, P. Eng.

June 24, 1980

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GEOLOGICAL REPORT

ON THE

PATO CLAIM (8 UNITS);

NANAIMO MINING DIVISION, B.C.

FOR

TALLY RESOURCES LTD.

INTRODUCTION:

The Pato Claim consists of 8 units situated southeast of Nahwitti Lake, approximately 25 kilometers west of Port Hardy on Northern Vancouver Island, British Columbia.

Staked to cover a portion of a belt containing known zinc-lead-copper-silver mineralization the claims are underlain by volcanic and sedimentary units of the Vancouver Group intruded by granodiorite and diorite.

An exploration program of gridding followed by geological mapping under the direction of the writer was initiated in June, 1979 to locate any known mineral occurrences and provide guidelines and control for future exploration.

GENERAL:

The property lies southeast of Nahwitti Lake, straddling and mainly south of the Port Hardy-Holberg Road. Coordinates are $50^{\circ} 42'$ North latitude, $127^{\circ} 48'$ West longitude.

Access is by the Port Hardy-Holberg Road and several logging roads which traverse the property.

Relief is moderate with elevations ranging from approximately 700 to 1700 feet above sea level.

Approximately two-thirds of the area has been logged, the remainder covered mainly by cedar, fir, balsam and hemlock. Dense second growth and debris covers much of the logged area, seriously hampering exploration.

Considerable exploration has been conducted on base-precious metal prospects in the Nahwitti Lake area since discovery of the HPH lead-silver deposits in 1930. The most recent systematic exploration of the mineralized belt was conducted by Giant Explorations Ltd. during the period 1966 - 1973.

PROPERTY:

The property consists of the following recorded mineral claim located in the Nanaimo Mining Division of British Columbia:

Pato claim, record number 370 - 8 units

The claim was located on March 26, 1979 and recorded on April 20, 1979.

WORK COMPLETED:

An east-west base-line was established in the vicinity of the Port Hardy-Holberg road and north-south cross-lines run at 100 meter intervals, with stations marked every 40 meters. East-west tie lines were run at the south limit of the cross-lines. Lines were established by chain and compass and marked with colored flagging.

A total of 4,000 meters of base and tie lines and 16,700 meters of cross-lines were established in this manner.

Geological mapping was carried out over the eastern portion of the property at a scale of 1:2,500, traverses being run along lines, roads, etc. and outcrop between lines tied into stations by pace and compass.

GEOLOGY:

GENERAL:

Regional mapping by the B.C. department of Mines - "Preliminary Geological Map, Rupert Inlet-Cape Scott Area, by K.E. Northcote, scale 1 inch = 2 miles; Geology, Exploration and Mining in British Columbia, 1970, pages 254-258" - indicates that the property is underlain by volcanic and sedimentary units of the Vancouver Group of Triassic-Jurassic Age intruded by granitic rocks in the south. The main structural feature is block faulting.

The stratigraphic section after Northcote is as follows:

Jurassic and/or Cretaceous - Intrusive Rocks

Varied composition from diorite to granite and includes porphyritic phases.

Lower Cretaceous Sedimentary Rocks

Conglomerate, sandstone, siltstone, shale, carbonaceous horizons.

Upper Triassic-Jurassic - Vancouver Group

Bonanza Subgroup

Upper volcanic unit, largely pyroclastic tuff, lapilli tuff and tuff breccia of andesite and basalt composition with some basalt and rhyodacite flows at the top of the unit. Lower sedimentary unit, thin bedded argillaceous and carbonaceous limestone, calcareous shale and siltstone and greywacke.

Quatsino Formation

Limestone, medium to thick bedded. -

Karmutsen Formation

Basaltic amygdaloidal and massive flows interbedded tuff, some pillow breccia and poorly developed pillows; thin limestone beds near top of formation.

Numerous contact metamorphic and replacement deposits are found in and along the contacts of the Quatsino Limestone and limestone units within the Karmutsen Formation in association with granitic intrusives throughout the Nahwitti Lake region. Deposits contain variable lead-zinc-copper-iron and precious metal values.

LOCAL GEOLOGY:

Within the mapped portion, or eastern half, of the Pato claim, outcrop is fairly frequent along the roads and creeks but is sparse away from these features, although overburden is not generally thick.

Andesite, occasionally amygdaloidal occurs immediately south of the main road, extending south past the middle of the claim in the Meade Creek area. Fine grained pyrite and pyrrhotite are common within these volcanics.

These are overlain by grey, fine to medium crystalline limestone in Canyon Creek, along the Meade Creek logging road and at Meade Creek. Thin bedded and phyllitic limestone occurs higher up Canyon Creek. The limestone strikes east to northeast dipping gently to moderately south. White felsite, rich in pyrite is exposed between lines 15 W and 16W near 15 S. Sheared (090/vertical) pyritic rhyolite or felsite which outcrops near 23 W, 14 S may be a continuation of the same band.

Considerable garnet and garnet-epidote skarn occur in both the limestone and andesitic rocks around Meade Creek which are in contact with diorite to the south. These rocks are all

rich in pyrite and/or pyrrhotite. Shearing in an easterly direction is common.

Lenses, stringers and pods of magnetite occur at several points along Meade Creek along with pyrite and pyrrhotite. Minor chalcopyrite, sphalerite and galena and, at one point, molybdenite have been noted.

Lead-zinc mineralization also occurs in crystalline limestone exposed by trenching and pitting at line 18 W, 13 S. Galena and sphalerite with pyrite and sparse chalcoprite are irregularly distributed in a silicified zone varying up to 4½ feet wide and trending S78°W/70°S. Mineralization was noted in 2 pits 35 feet apart. Additional trenches and pits are known to exist in the area but, very thick underbrush and second growth would have to be cleared for all of these to be located. In earlier reports this has been referred to as the Bluff Showing.

Both these, and to some extent the Meade Creek showings occur near the boundary between the Pato claim and the Dust claim to the south. The exact boundary depends on the location of earlier claims which have not been located.

Massive and disseminated pyrite with pyrrhotite, magnetite and chalcopyrite occur in a small outcrop near 20 W, 5 S. Ardesite, limestone and diorite occur near by.

CONCLUSIONS AND RECOMMENDATIONS:

Several base-precious metal prospects occur within the region surrounding the Pato claim.

Lead-zinc-copper values are subcommercial in the Meade Creek exposures although further investigation is warranted on the basis of the strength and size of the skarn zone. However, until the exact boundary is determined, these appear to be on the adjoining property.

Erratic, but significant, galena-sphalerite mineralization occurs at the Bluff Showing. Earlier sampling by the writer also indicated appreciable silver values. Further prospecting and mapping is necessary to locate additional previously noted trenches and pits which are hidden by thick second growth.

The upper Quatsino Limestone-both the upper and lower contacts - form favorable locations for additional lead-zinc

copper mineralization and should be explored in detail throughout the length of the property.

Further work should consist of detailed soil-geo-chemical and geological surveys along this trend followed by trenching and/or drilling as warranted.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'R.H.D. Philp', written in a cursive style.

R.H.D. Philp,
P.Eng.

Vancouver, B.C.

June 26, 1980

CERTIFICATE

I, RONALD H.D. PHILP, of 107 - 325 Howe Street, Vancouver, B.C.
do hereby certify that:

1. I am a graduate of the University of British Columbia
(B.A. Sc. 1961).
2. Since graduation I have been engaged in mining exploration
in North America, Central America, Australia and Fiji.
3. I am a registered member in good standing of the Association
of Professional Engineers of British Columbia.
4. I supervised the work described in this report during June
and July, 1979.



Ronald H.D. Philp.
P.Eng.

Vancouver, B.C.
June 26, 1980.

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.

In the Matter of the gridding and geological survey on the Pato Claim, Nanaimo, M.D.

To Wit:

I, R. Philp

of 107 - 325 Howe Street, Vancouver, B.C.

in the Province of British Columbia, do solemnly declare that the following persons were employed and costs incurred in conducting the work during the periods June 5 - July 22, 1979.

Pato Claims

Personnel

Matt McGarry - Party Chief -	11½ days	@ 81.25	=	934.37
Paul Bustin - Helper	9½ days	@ 65.00	=	617.50
Tony Kernachan - Helper -	3½ days	@ 47.27	=	165.45
Z. Philp - Helper -	2 days	@ 47.27	=	94.54
R. Philp - Geologist - field	3½ days	@ 200.00	=	700.00
- Geologist - report, maps.	2 days	@ 200.00	=	400.00
				<u>\$2,911.86</u>

Disbursements

Groceries, supplies	499.66		
Transportation, car, ferries, gas	313.74		
Prints	26.28		
Airfares	121.36		
Camper	116.67		
Camp rental	58.37		
Truck @ \$25.00/day	400.00		
	<u>\$1,536.08</u>		\$1,536.08
+ 15% overhead on disbursements			<u>230.41</u>
			<u>\$4,678.35</u>

TOTAL

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

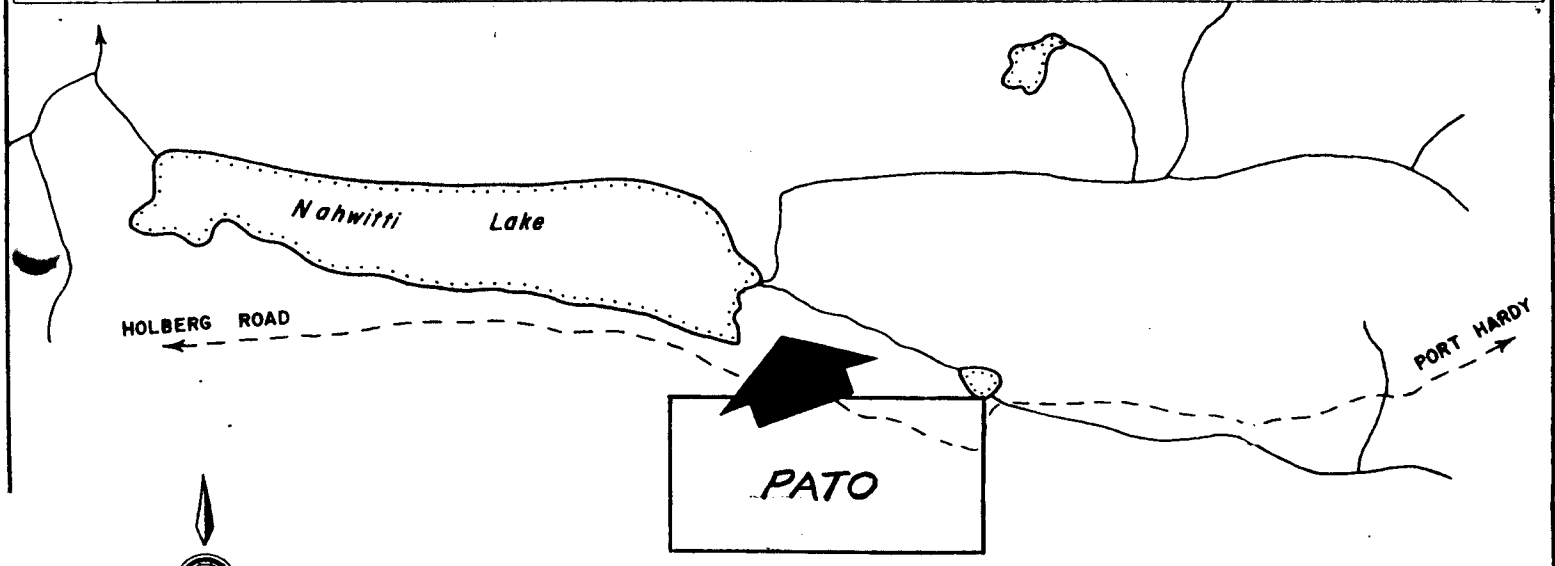
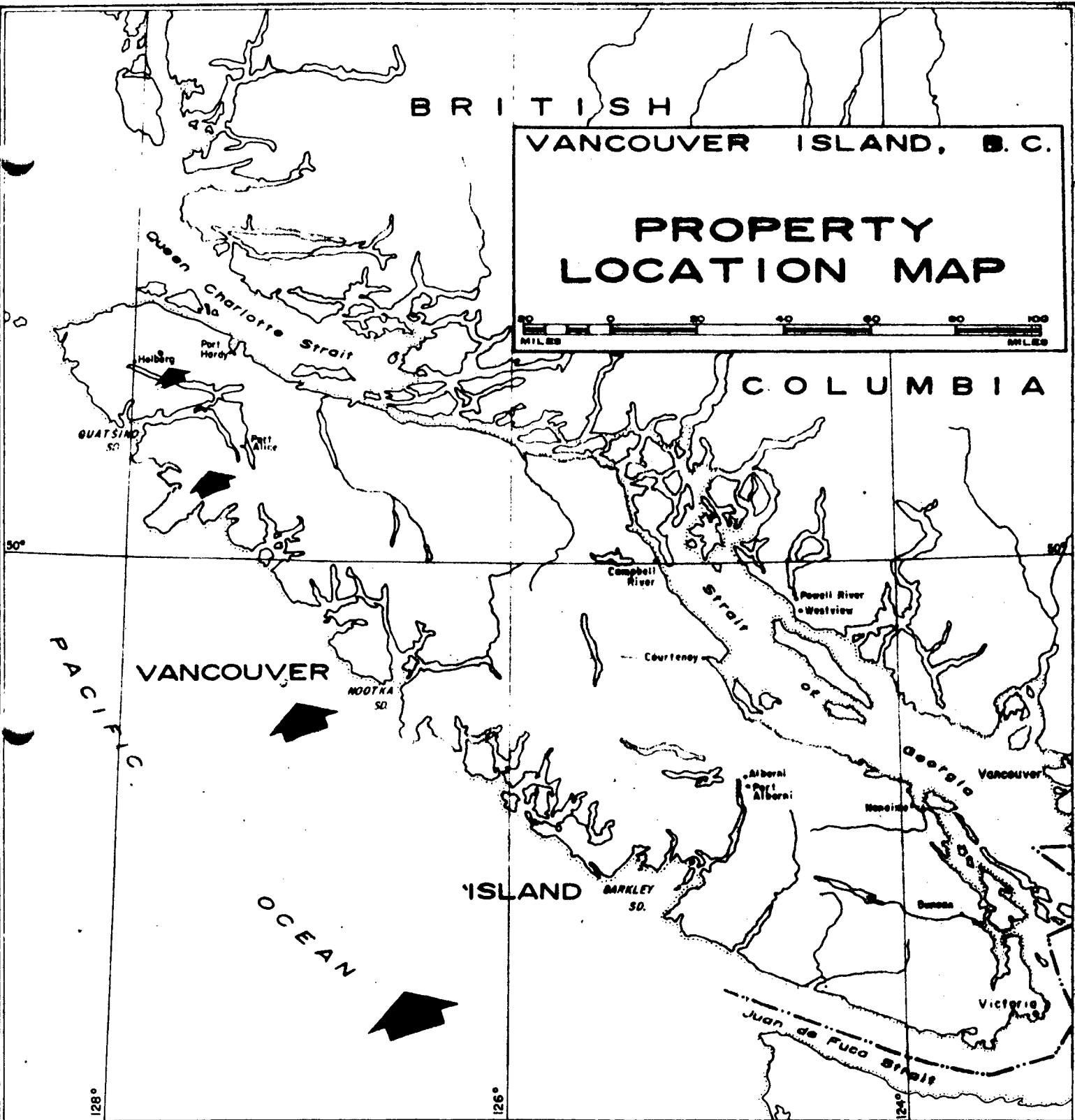
Declared before me at the
of _____, in the
Province of British Columbia, this
day of _____, A.D.

A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.

BRITISH

VANCOUVER ISLAND, B. C.

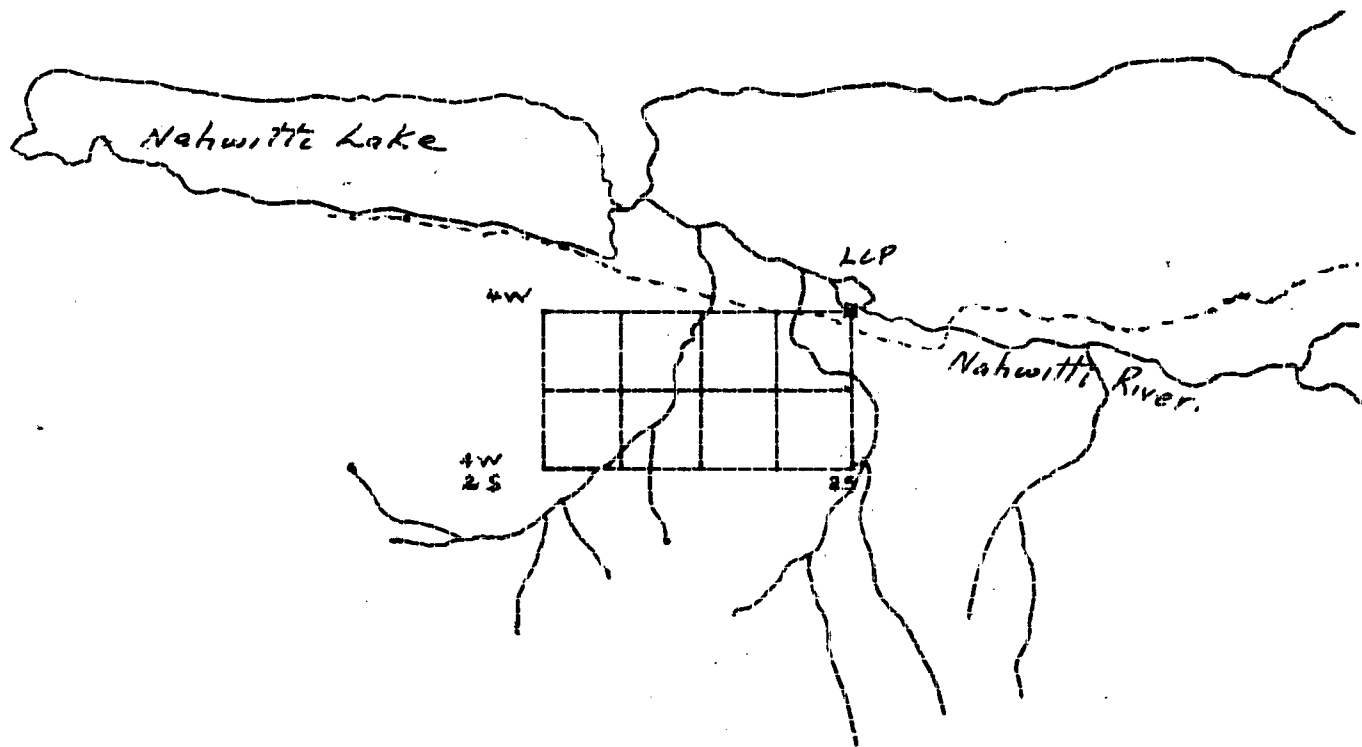
PROPERTY LOCATION MAP



TALLY RESOURCES INC. LOCATION SKETCH

PATO CLAIM:
NAHWITTI LAKE AREA, VANCOUVER ISLAND
NANAIMO M.D.





50° 40' N ———
|
12.7° 50' W

Location Map
of Mineral Claims
scale: 1:50,000

AGILIS EXPLORATION SERVICES LTD
 TALLY RESOURCES LTD
 PATO CLAIM
 Surface Plan and Geology
 Scale 1:2500 June, 1980

MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
 NO. 8069

LEGEND

- Bedding, contact
- Jointing
- Foliation
- Roads
- River, stream
- ANDESITE, TUFFACEOUS ANDESITE, BASALT, AMYGDALOIDAL IN PART
- LIMESTONE - MAINLY GREY, FINE TO MEDIUM CRYSTALLINE
- FELSITE, RHYOLITE
- SKARN
- GRANITIC INTRUSIVE
- LEAD, ZINC, COPPER, MAGNETITE

