GEOCHEMICAL, GEOPHYSICAL,
AND GEOLOGICAL EVALUATION
of the
ERICKSEN-ASHBY PROPERTY
(EA 1-2, BC 1-3, and Bear 1-9 Claims)
Tulsequah District
Atlin Mining Division
N.T.S. 104-K/11
Lat. 58°36' North, Long. 133°30' West
British Columbia

February 22, 1988

on behalf of NORTHWIND VENTURES LTD.
Calgary, Alberta

bу

T. Bojczyszyn, P.Geol.

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INTRODUCTION

Taiga Consultants Ltd. was contracted by Northwind Ventures Ltd. to undertake a geological evaluation of the Ericksen-Ashby property and to design a Phase II drilling program with particular attention to pre-drilling preparation (holding pond emplacements, drill pad construction, etc.). Phase I field work consisted of the emplacement of two flagged grids (with slope correction), soil geochemical sampling (Au, Ag, Pb, Zn), geological mapping (1:1,250 scale), and VLF-EM surveying. Reconnaissance geological mapping, stream silt sampling, and detailed lithogeochemical sampling of gossan zones was also undertaken outside the grid areas. Resampling of several old trenches within the Grizmo Grid and additional sampling of gossanous areas were also completed in the area southeast of the adit.

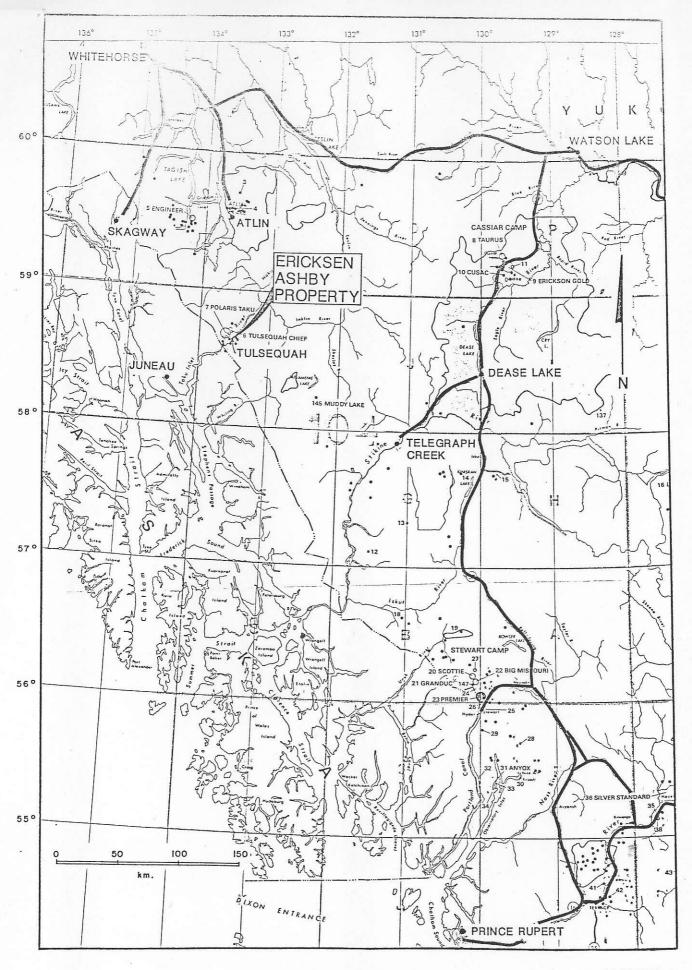
Property Status

The Ericksen-Ashby property is located within the Atlin Mining Division on N.T.S. map-sheet 104-K/11 W (Figures 1 and 2, Map 5). The property comprises 14 contiguous mineral claims totalling 217 units, covering approximately 5,425 hectares (13,406 acres). The claim status is enumerated in the table overpage.

Assessment work requirements under "Mineral Act Regulations (B.C. Reg 587/77) necessitate an exploration expenditure of \$100/unit for the first three years and \$200/unit for each subsequent year; plus a recording fee of \$5 for each \$100 of exploration and development work recorded.

Yearly assessment requirements for the property is \$22,550 increasing to \$44,485 for year 4. These claims would be protected to the anniversary date in 1992 by an expenditure of \$112,135.

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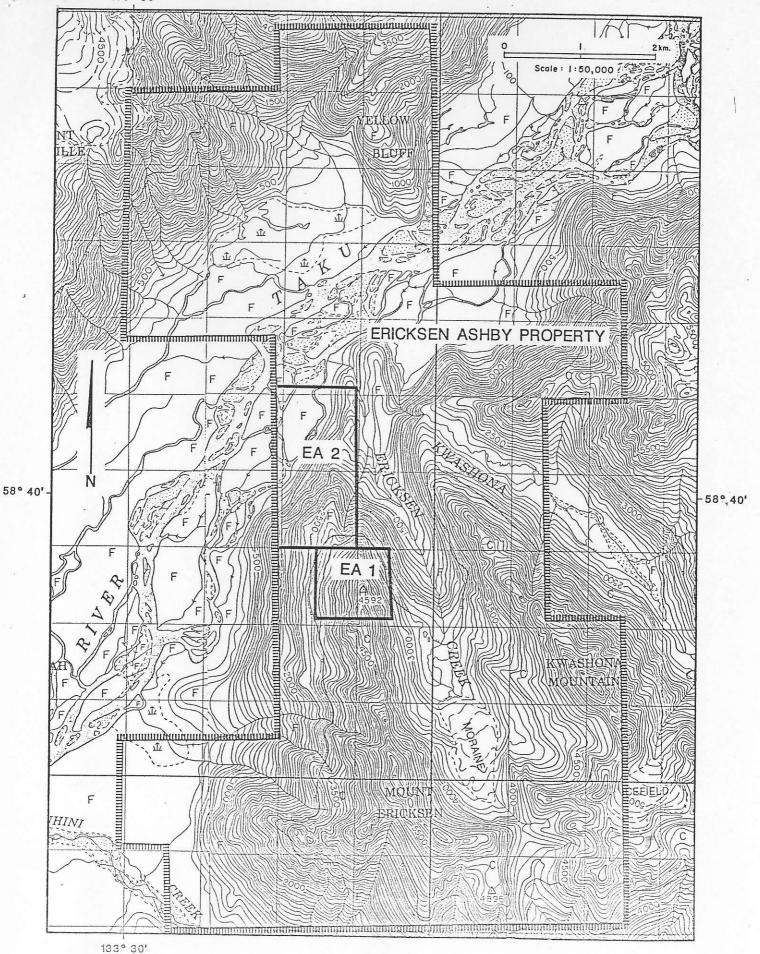


TABLE 1 - CLAIM STATUS

Claim <u>Name</u> EA 1 EA 2	No.of <u>Units</u> 4 8	Record <u>Number</u> 151 671	Expiry Date } May 23, 1991 }	Ownership G. Rayner G. Rayner
BC 1 BC 2 BC 3 Bear 1 Bear 2	12 20 20 16 20	2825 2826 2827 2854 2855	} } } Mar. 25,1988 }	Georgia Resources Inc. Georgia Resources Inc. Georgia Resources Inc. Georgia Resources Inc. Georgia Resources Inc.
Bear 3 Bear 4 Bear 5 Bear 6 Bear 7 Bear 8 Bear 9	16 20 15 8 18 20 20	2856 2857 2858 2859 2860 2861 2862	<pre>} } Apr. 3, 1988 } </pre>	Georgia Resources Inc.

Location and Access

The property is situated 4 km east of the abandoned town of Tulsequah and 7 km east of an airfield located on the banks of the Tulsequah River. The Taku River bisects the property with the 'Yellow Bluff' to the north and a prominent north-south trending ridge culminating in 'Mount Ericksen' to the south.

The property is located 60 km northeast of Juneau, Alaska. Supplies and helicopter service may be obtained either from Juneau or from Atlin, B.C., 120 km to the north, while commercial jet and DC3 service is available from Whitehorse, 260 km to the north-northeast.

A regular river boat service was maintained between Tulsequah and Juneau from 1931 to 1957 when mining operations ceased from the Polaris Taku and then the Tulsequah Chief and Big Bull Mines. The Taku River is navigable by tug and barge from tidewater to the property.

*Commercial salmon fishing camps are located on the Taku River upstream of the Tulsequah River confluence.

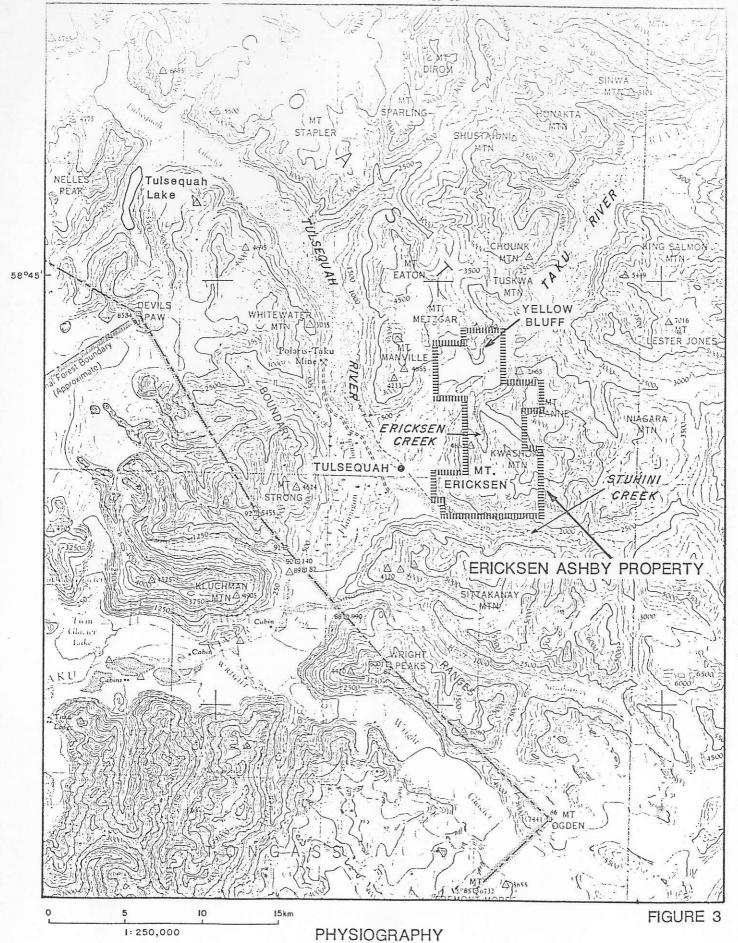
A Taiga Consultants crew mobilized from Calgary to Whitehorse on August 18, 1987, and then was flown by DC3 to the Tulsequah airfield. Camp supplies were then slung by 206B Jet Ranger helicopter (Capital Helicopters of Atlin) up to an old campsite, just east of a pond at the 823 m (2700') elevation contour.

Physiography

The property lies within the northwest trending Boundary Range of the Coast Mountains and is transected by a wide valley occupied by the Taku River (Figure 3). This southwest trending flat-bottomed valley averages 2 km in width. Tributaries flowing through the property (notably Ericksen and Kwashona Creeks) have their source in rock glacier or ice fields respectively. Alpine glaciation has sculpted jagged spires and narrow saw-tooth ridges. Local relief varies from 30 m (100') at the Taku River to 1900 m (6500') at Mount Ericksen.

Tree line is situated at 900 m (3000') above which elevation outcrop is plentiful. Below tree line, outcrop is poor with very dense undergrowth of willow, tag alders, and devil's club. A mature coniferous rain forest at 300m (1000'), south of the Taku River, contains very dense devil's club.

Pleistocene glaciation has left U-shaped valleys with over-steepened walls, truncated spurs, and hanging tributary valleys. After the Cordilleran ice shield had retreated, alpine glaciers may have receded and disappeared entirely (Souther, 1971). They were rejuvenated and reached a maximum about the middle of the nineteenth century (Matthes, 1942) and have gradually retreated with interrupted lesser advances.



The Tulsequah glacier, a typical valley glacier, contains a phenomenon, that has important exploration significance. Tulsequah Lake is dammed at one end by a distributory arm of the Tulsequah glacier. The lake fills; and by August, suddenly drains its 10 billion cubic feet of water over a period of three days. This floods the Tulsequah River flood plain, the Polaris Taku townsite, and the airstrip. As the lake empties, the ice dam (which was floated when the lake filled) collapses and begins another cycle of filling and dumping. Once the Tulsequah River subsides, the airstrip can be used within days, barring any debris that may have floated down the airstrip. In 1987, the airstrip flooded on August 27.

2

PREVIOUS WORK

(after Adamson, 1987)

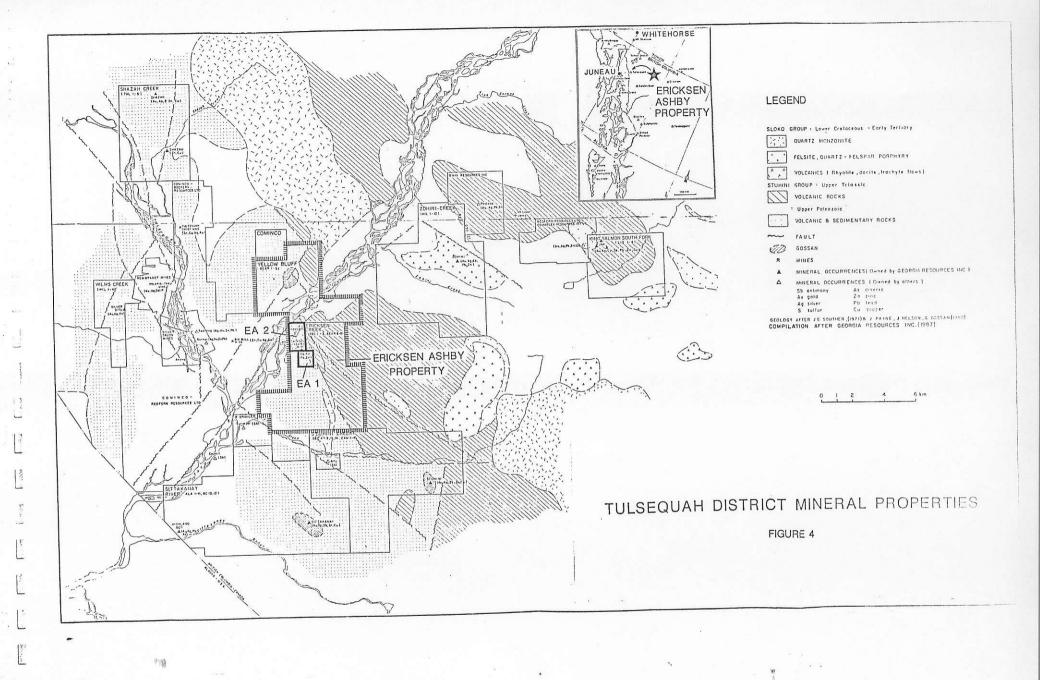
The history of economic activities (Figure 4) in the Tulsequah district has been described by J. G. Souther (1971) in .S.C. Memoir 362 as follows:

The early history of mining and prospecting in the Taku River area was reviewed by Kerr (1948), who mentioned a record of a gold discovery along the Taku River as early as 1875. During the Klondike Rush of 1897 and 1898, the Taku was used as a route of entry to the interior and this led to extensive prospecting of the country accessible from Taku Valley. In 1923, the Tulsequah Chief property was discovered on the east side of Tulsequah River, and active development of the property in 1929 attracted prospectors who staked claims. Those which were later to become the Big Bull and Polaris Taku mines were both discovered in 1929, as were the Ericksen-Ashby and several other smaller properties situated in the lower part of Taku Valley.

Early attempts at development were abandoned and it was not until 1937 that the Whitewater property was brought into production as the Polaris Taku mine. It continued to operate until 1951, during which time a total of 719,336 tons of ore was milled. yielding gold valued at more than \$8,000,000. Following closure of the Polaris Taku mine in 1951, the mill and camp were leased to the Consolidated Mining and Smelting Company of Canada Limited (now Cominco Ltd.) which started production from the Big Bull (Mannville) and Tulsequah Chief mines that same summer. Ore from both mines was trucked to the Polaris Taku mill and concentrates shipped by barge down the Taku River to tidewater. From 1951 until production ceased in 1957 due to low metal prices, combined production from the Big Bull and Tulsequah Chief mines amounted to 1,029,089 tons of ore milled, yielding 94,254 ounces of gold, 3,400,773 ounces of silver, 13,603 tons of copper, 13,463 tons of lead, 62,346 tons of zinc, and 227 tons of cadmium.

With the advent of sharply increased precious metals prices, exploration in this region was reactivated in the early 1980's. Much of the activity during this period took place in the general drainage basin of the Tulsequah River surrounding the three former producing mines.

The history of the Ericksen-Ashby property parallels that of exploration activities in the Tulsequah district in general. In 1929, claims were staked by prospectors Ericksen and Ashby after discovering several massive



sulphide occurrences on the northwestern flank of Mount Ericksen. Until 1950, mineral exploration work sufficient only to maintain annual assessment requirements was undertaken.

In 1951, the property was optioned to Cominco Ltd., then operating the Big Bull and Tulsequah Chief mines. Cominco carried out geological mapping, hand trenching, and surface sampling of sulphide showings. In 1952, the company attempted to explore the uppermost mineralized zones by drilling a long hole from Ericksen Creek. However, a rock avalanche destroyed the drill equipment before the hole was completed, and the option was allowed to lapse.

Little further work was done until 1963. Ericksen-Ashby Mining Co. Ltd. was formed to carry out more definitive work. In 1963, the new company implemented more surface exploration, directed largely at Zone 8. In 1964, an adit was driven southeasterly adjacent to two zones (3 and 13) that were exposed at surface. Eight underground diamond drill holes were also emplaced from a station cut at the end of the adit. In 1965, a self-potential survey was undertaken over the small plateau that lies north of the adit; further surface trenching was also carried out in this area. No further work was done by the company, and in 1975, the property was allowed to revert to the Crown.

In 1976, the property was restaked by Mr. G. H. Rayner who optioned it to Anglo Canadian Mining. In 1979, J. G. Payne of Stokes Exploration Management geologically mapped the surface and underground workings in detail. In 1980, Anglo Canadian attempted to diamond drill Zone 1, on a relatively steep slope above the underground workings. This was not successful, due to a loss of surface water for drilling. In 1981, the property was optioned to Island Mining and Exploration. This company successfully drilled six holes beneath Zone 1 from a single setup, and also drilled five other holes to test two other zones (3 and 8). Two of the six holes on Zone 1 returned encouraging results; no promising sulphide intersections were cut in the other two zones tested.

In 1987, the EA claims were optioned to Northwind Ventures Ltd. At the same time, the company purchased the BC and Bear claims, surrounding the EA group. Cominco Ltd. and Redfern Resources have recently cleared the Tulsequah airstrip, as part of their intensive re-evaluation of the Tulsequah Chief and Big Bull mines and on their large surrounding property.

REGIONAL GEOLOGY

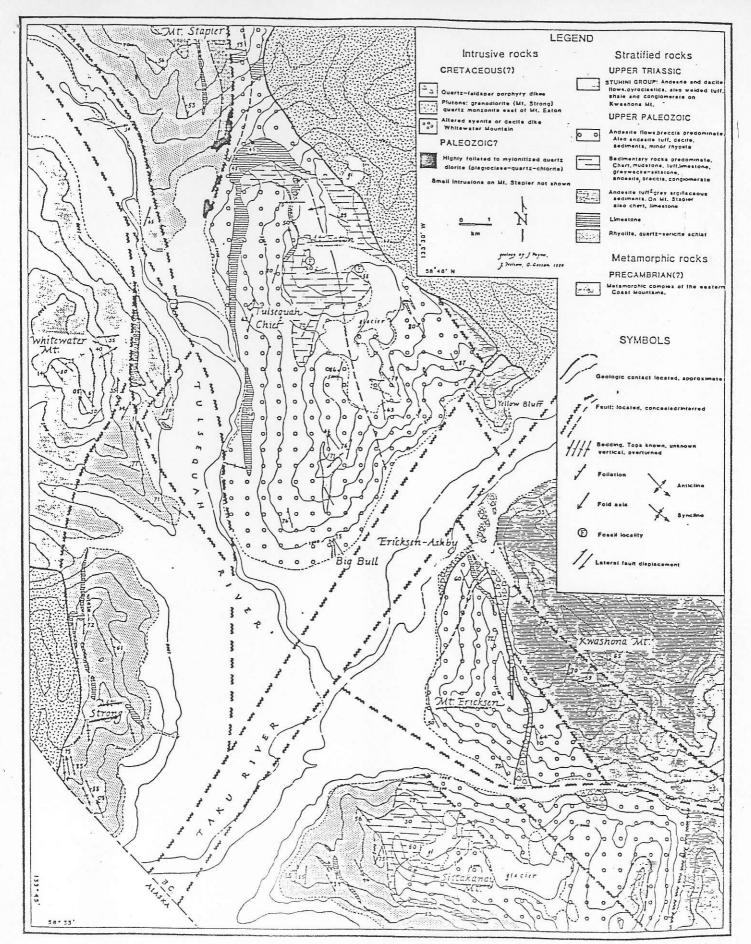
after Nelson & Payne, 1984 (Figure 5) and Souther, 1971 (Figure 6)

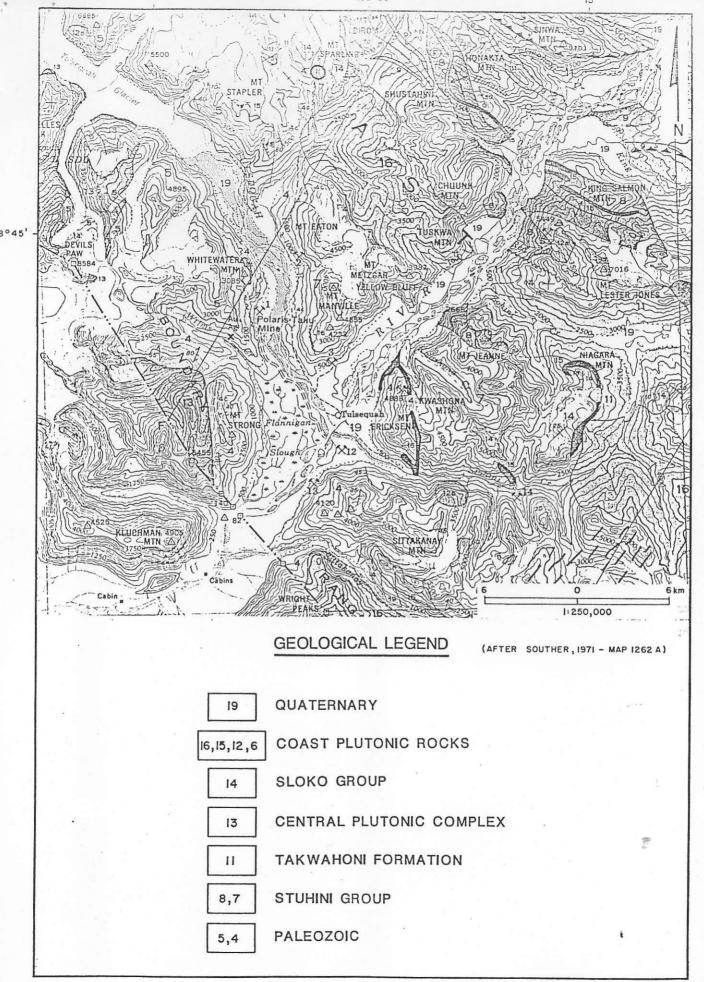
The Tulsequah district is bounded by Precambrian(?) age metamorphic rocks to the west in fault contact with Upper Paleozoic predominantly andesitic assemblages. To the east, Paleozoic rocks are in fault contact with unconformable volcanic rocks of the Upper Triassic Stuhini Group. The latter is overlain by sedimentary rocks of the Jurassic Takwahoni Group. The Tertiary Sloko Group is preserved as down-faulted blocks and erosional remnants; it overlies all older rock sequences in the area. The sequences are intruded by Coast plutonic rocks (Triassic, Central Pluton [pre-Upper Cretaceous], and Tertiary).

Parts of the Paleozoic volcanic-sedimentary assemblage in the Tulsequah map-area were previously mapped as Late Triassic Stuhini Group by Souther (Nelson and Payne, 1984). The assemblage consists of fault blocks that are only stratigraphically continuous with each block. The Mount Strong block may correlate with the upper section in the Sittakanay Mountain block. Massive andesites in this block are similar to Mount Eaton and Mount Ericksen. The Mount Stapler block contains thick sections of rhyolite. Hence, tuffs on Mount Strong had their source from volcanic centres on the other blocks.

Nelson and Payne interpret the Paleozoic rocks to represent an andesitic island edifice where sedimentary basins, reefs, and rhyolite eruptive centres developed during lulls in andesitic volcanism. Massive sulphide mineralization occurred within the rhyolite and sedimentary settings.

The volcanic package includes massive andesite, basaltic andesite flows, pyroclastic breccias, tuff, and thinly bedded green tuff with minor rhyolite and dacite. The sedimentary sequences include chert, limestone with Pennsylvanian corals and fusilinids, limestone breccia, andesite conglomerate, greywacke, siliceous mudstone, and mudstone.





The Stuhini Group (after Souther, 1971) forms an extremely variable succession of eugeosynclinal sedimentary and volcanic rocks. They exhibit rapid lateral changes in thickness and lithology, and consist of basal conglomerate, andesitic flows and pyroclastics, coarse breccia, volcanic conglomerate, greywacke, and siltstone. The basal conglomerate consists mainly of volcanic clasts but also includes occasional clasts of gneisses, quartzite, and granodiorite, which indicate a Precambrian(?) metamorphic and early phase of Coast plutonic arch uplift. The volcanics are predominantly dark green in the lower section and light green or purple in the upper section. They may vary from subaerial flows to entirely submarine in origin. These include pillow lavas and fragmental rocks which include broken pillows, a result of submarine slides.

The Takwahoni Formation (part of the Labarge Group) consists of clastic sedimentary rocks in a structurally shortening trough. Much of the debris has been derived from volcanic terrain and includes Upper Triassic limestone clasts. Sandstone and conglomerates differ from Stuhini sediments in that they include a granitic source with a relatively high proportion of quartz and potash feldspars. Collections of ammonites date these rocks as Lower to Middle Jurassic.

The Sloko Group consists mostly of pyroclastic rocks, varying from coarse explosion breccias and agglomerates to fine-grained banded vitric tuffs and ignimbrites. Andesites and trachytes are more predominant than dacite and rhyolite. Mafic flows weather rusty red or black while pyroclastic and sedimentary rocks weather green, purple, and brown. Flows mapped in the field are often found, by thin section examinations, to be welded ash-flow tuffs and include accidental clasts of andesite and quartz monzonite, the latter thought to originate from the subvolcanic basement.

Much of the Sloko Group is flat-lying or gently tilted with folds developing in response to block faulting. Dykes of andesite to rhyolite composition are often associated with normal faults. Circular structural features and extreme thicknesses suggest cauldron subsidence. A gradation from aphanitic felsite to fine-grained and then medium-grained quartz

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monzonite at the base of the Sloko pyroclastics and cross-cutting features suggest a genetic relationship. It appears that the Sloko Group is derived from periodic explosive eruptions from a quartz monzonite magma. Extensive faulting and block stoping, in cases, brought the magma in contact with the lower volcanic accumulation.

Triassic foliated quartz diorite (including granodiorite and quartz monzonite) exhibit a high degree of alteration (sericite, epidote, iron oxides, and chlorite). Contact rocks are hornfels, often faulted with shearing, brecciation, and hydrothermal alteration. Evidence suggests that these rocks were emplaced in early Triassic time, preceding deposition of the Stuhini Group.

The Central Plutonic Complex includes intrusive and metamorphic phases of several different ages. Foliated granodiorite is the most common; however, on outcrop scale, there may be up to six distinct phases.

Tertiary (and Cretaceous) quartz monzonite contains predominant biotite, commonly smoky quartz and miarolitic cavities. These appear coeval in part with the Sloko Group volcanics.

Felsite and quartz-feldspar porphyry, thought to bear close spatial relationship to quartz monzonite, cross cut all phases of the Coast Plutonic Complex rocks and may occupy collapse structures. The felsites vary from aphanitic to finely porphyritic, and have sharp contacts. In places, these contacts may be obscured in intense hydrothermal alteration with pyritization, and dolomitization of the felsite and the intruded rock.

MINERAL DEPOSITS

after Souther, 1971 and Adamson, 1987

Within the Tulsequah District, copper is commonly found in volcanic rocks as thin films of malachite on joint surfaces and as disseminated chalcopyrite in shears in altered zones associated with feldspar porphyry and quartz monzonite, and may contain significant molybdenite. Base metals deposits, with gold and silver values, occur as replacement bodies in sheared volcanic rocks, in skarns, and in quartz-feldspar porphyry bodies abutting volcanic rocks in association with felsites. Alteration generally includes silica, carbonate, albite, disseminated pyrite, and stringers of quartz-carbonate, barite, or stibnite. Ore minerals include arsenical gold, argentiferous galena, tetrahedrite, stibnite, sphalerite, and chalcopyrite.

Souther (1971) suggests a genetic relationship between the Tertiary intrusions and polymetallic mineralization which is zoned with respect to the top of the intrusions. Molybdenite is found in coarse quartz monzonite and deep-seated dykes and sills with very little wallrock alteration. Copper and molybdenite occur in stocks and cupolas while copper, lead, and zinc are found in adjacent altered wallrock. Veins of stibnite, barite, chalcocite, and quartz-carbonate (with or without pyrite) occur some distance above the actual intrusions. Altered rocks here are bleached to light buff or greenish colour with a deep rind of rusty weathering. Replacement by quartz-albite and carbonate has destroyed the original textures. There are occasional large rhombs of ferrodolomite.

The Tulsequah Chief deposit (after Irvine, 1957) was discovered by prospectors who were attracted by the prominent brownish-yellow bluffs cropping out at 1600' on the steep valley wall. Massive sulphide bodies appear localized within a main shear zone at the junction of cross fractures. These correspond to regional faults which trend northwest and northeast. These bodies are steeply pitching chimneys of ore with maximum dimensions of 500'x30'x1200' (Figures 7 and 8). The elongate bodies correspond to either direction and may shift from one structure to the other along the pitch of

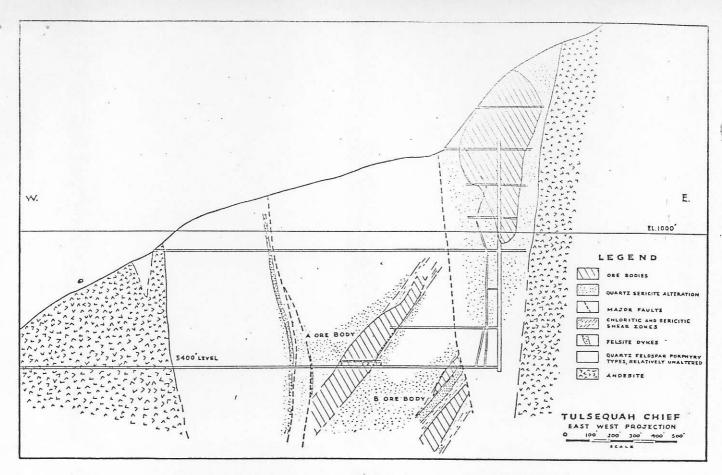


FIGURE 7. EAST-WEST PROJECTION, TULSEQUAH CHIEF MINE

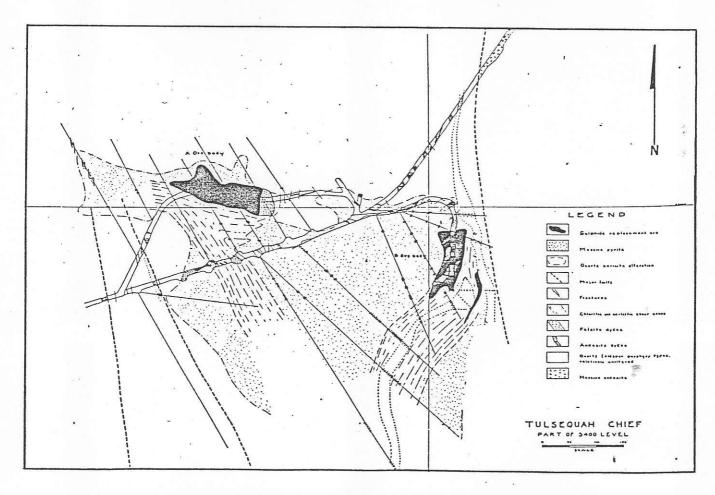


FIGURE 8. PLAN OF 5,400 LEVEL, TULSEQUAH CHIEF MINE

the ore. Sphalerite, the most abundant economic mineral, occurs as disseminations in schist, as massive sulphide, or as bands and stringers replacing massive pyrite. Chalcopyrite is intimately associated with massive pyrite while bornite and tennantite occur as local concentrations. Alteration consists of an inner non-siliceous sericite zone with smaller barite anhydrite areas. The outer zone is characterized by high quartz content.

The Big Bull mine ore bodies occur adjacent to a major northwest trending fault or in minor structures which branch from it. The intersection of these structures forms a "V" in cross-section. The intersection of these two planes rakes to the south at 25° controlling the main orebody. Mineralization is similar to that of the Tulsequah Chief but with less pyrite. Alteration extends along the main fault for a considerable distance beyond the known limits of ore deposition as a broad siliceous halo. A possible influence of the shallow controlling raking structure is the projection of the base of a tuff on to the fault. The banded tuff has contrasting competency to the massive fragmental of the mine and may have acted as a dam to ascending mineralizing fluids.

The Polaris Taku mine is bounded by amphibolite and serpentine to the north, and by limestone to the southwest (Smith, 1948). Gold is associated with fine-grained arsenopyrite disseminated in altered tuffs and massive pyroclastics and in quartz-carbonate stringers. Stibnite occurs in the same fractures with late carbonate veins and in some cases is associated with gold. The structural setting is complex. Third-order folds may have resulted from the imprinting of previous folds. Shearing along the margins of both the limestone belt and the ultrabasic intrusion developed from a northeast-southwest compression. This may have produced a rotational shear and favourable structures such as the "A" shear zone, north-south shear zones, and connecting arcuate faults (Figures 9 and 10). Ore shoots within these structures appear localized along the plunge of the third-order folds, especially in areas of steep plunge. These appear to be zones of stretching and flattening of intersecting vein systems, commonly producing wide bodies These coincide with areas of altered serpentine and of ore-grade material. high gold values in adjacent veins.

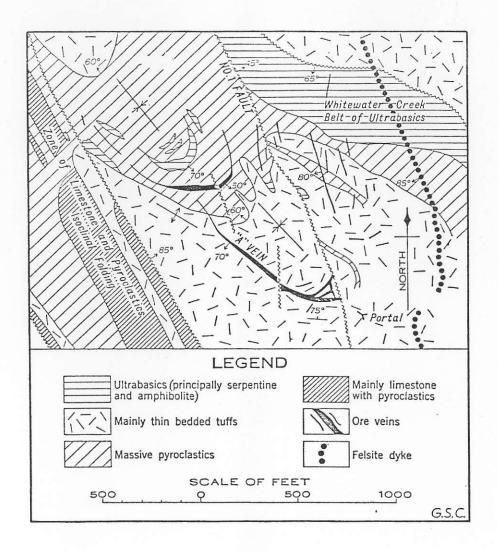


FIGURE 9. GEOLOGICAL MAP, POLARIS TAKU MINE.

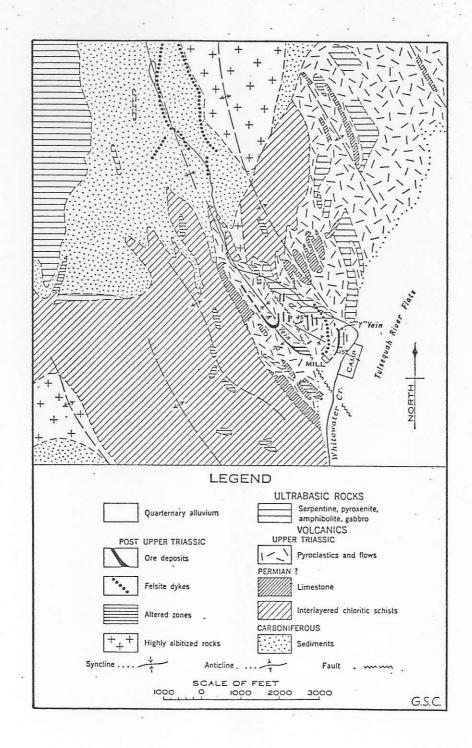


FIGURE 10. GEOLOGICAL MAP OF VICINITY OF POLARIS TAKU MINE

SUMMER 1987 EXPLORATION

Initial objectives of the Phase I program on the Ericksen-Ashby property were to:

- 1. visually prospect and geologically map the Mesozoic Stuhini Group in the Yellow Bluff area and the Paleozoic rocks on the northwest side of the Taku River
- 2. identify the cause of the airborne conductor
- 3. geologically map the local plateau area between the portal and the bluff above the Taku River (1:1,250)
- 4. initiate a combined magnetometer and electromagnetic (horizontal loop) survey
- 5. collect soil and lithogeochemical samples (for Au, Ag, Pb, Zn analysis) along geophysical lines in overburden covered areas
- 6. examine the Zone 2 area for a suitable diamond drill station
- 7. visually prospect, map, and contour soil sample the area southwest of Mount Ericksen
- 8. map with particular attention to structure, and chip sample known zones.

Prior to undertaking a horizontal-loop electromagnetic survey, which would require line-cutting, chaining, and slope correction, a VLF-EM survey was planned to test for the extension of known sulphide horizons. The goals of this program were to:

- 1. define drill targets with a detailed map of drill pads
- 2. estimate the cost/time/effort/safety for the construction of the pads
- 3. estimate the length/dip/azimuth of each hole
- 4. determine whether it was worth the time and cost to extend the adit and initiate underground drilling.

Exploration consisted of emplacement of two flagged grids (with slope correction), soil geochemical sampling, geological mapping (1:1,250 scale), and VLF-EM surveying. Reconnaissance geological mapping, stream silt sampling, and detailed lithogeochemical sampling of gossan zones was also undertaken outside the grid areas. Resampling of several old trenches and

additional sampling of gossanous areas was also completed in the area southeast of the adit.

The program was geared to sampling and mapping gossanous areas that were not previously sampled due to precipitous topography by utilizing the expertise of professional climbers. The program was helicopter supported approximately every second day with a 206B Jet Ranger based out of Atlin.

Weather conditions during the course of the program were excellent; bad weather days were used to work on the grid adjacent to camp.

Approximately 345 soil samples were acquired and sent to TerraMin Research Labs in Calgary and analyzed for gold, silver, lead, and zinc. Gossans on cliffs were rock-chip sampled, logged, and submitted for geochemical analysis.

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PROPERTY GEOLOGY

after Adamson, 1987

Payne (1979) mapped the EA 1 and 2 claims at a scale of 1:1,200 (see Map 1). This map has been modified (from his report) to include detailed areas of previous trenching. The property is underlain to the southwest by late Paleozoic andesitic volcanic rocks containing minor sediments and acidic volcanics while the northeastern half consists of Stuhini Group volcanic rocks. The older rocks generally strike northwest and dip steeply southwest; the younger sequence is more complexly folded (Map 1). A Cretaceous(?), north-northwest trending feldspar porphyry dyke-like intrusion cuts across the late Paleozoic rocks from Stuhini Creek on the south, to the confluence of Ericksen Creek and the Taku River on the north.

The Taku River valley, as it crosses the property, evidently is fault controlled with both strike and dip movement indicated. Faults on the property generally strike deeply northwest and northeast, sympathetic to the regional structures.

In the northeast sector of the property (Yellow Bluff area), Stuhini Group rocks are ubiquitously pyritized and limonite stained. These very prominent bluffs on the Taku River were geophysically surveyed in 1982 with a helicopter-borne INPUT system by Questor Surveys. A six-channel anomaly signifying strong conductivity was recorded near the top of a fragmented pyritic zone that lies within the Bear 2 claim. The cause of this anomaly, which may reflect a concentration of massive sulphides, has not yet been explained.

The Ericksen-Ashby workings consist of an adit collared at 975 m elevation and driven southeast for 150 m. To date, 27 core holes (excluding the abortive 1952 Cominco hole) have been drilled on the property, eight from a single site underground (Figure 30), and eleven from three sites on surface. Of the eight holes drilled by Ericksen-Ashby Co. Ltd., only three sites have subsequently been re-located (Map 1).

Mapping by Payne in 1979 over a length of 1650 m identified a stratigraphic section that strikes northwest to north and dips 55° to 80°SW. Two sedimentary units occur in the section, each bounded by massive andesitic volcanic units. The younger(?) eastern unit comprises thin to medium banded cherts with some thin limestone beds. The older(?) western unit consists predominantly of limestone, but with abundant andesite flows pyroclastics, and thick wedges of chert and chert breccia. This western unit (100 to 200 m thick) hosts most of the economically interesting massive sulphide lenses in the adit area.

A prominent northeast striking fault divides the area into two distinct structural blocks. Northwest of the fault, the topography is relatively moderate. A small upland plateau in this vicinity will provide 'fair' access - helicopters can land here with relative ease, drilling water can be trapped, and drill sites can be established with only minor difficulty. Southeast of the structure, the terrain becomes dramatically more precipitous; diamond drill exploration will consequently be much more difficult to execute from the surface.

To date, 13 sulphide zones have been identified in the adit area (Map 1). Zone 7 occurs in the eastern sedimentary unit; Zones 4, 5, 8, 10, 11, and 12 occur in the northern structural block of the western sedimentary unit; and Zones 1, 2, 3, 6, 9, and 13 occur in the southern block. Each zone usually comprises several lenses or pods of various sizes.

Sulphide mineralization (pyrite with sphalerite and galena) tends to occur in two modes: as a skarn with rhodonite, pyrrhotite, and/or magnetite in limey rocks; and as a more stratiform replacement in cherty rocks in very close proximity to rhyolite. In general, skarn type deposits appear to be more common in the northern structural block than in the southern block where rhyolite appears to be more plentiful. However, the internal stratigraphy of the lower half of the northern block is relatively unknown, probably because outcrop exposures are not nearly as common as in the southern block.

THE COURSE CONTROL OF COME CONTROL

The overall average grade of many representative surface samples, collected by a number of companies over the years from all known zones, is in the order of 6 oz/ton silver, 3% lead, and 10% zinc. The most significant mineralization encountered in drilling to date was intersected in two of six holes drilled beneath Zone 1 from a single setup on the southern block (Map 1). Hole 86-3 cut 20.2 m of sulphide mineralization, with the best intercept within this section assaying 16.5 oz/ton silver, 4.94% lead, and 4.22% zinc over 9.2 m. Hole 86-4 cut 5.1 m of sulphide mineralization that included an intercept that assayed 18.3 oz/ton silver, 6.42% lead, and 6.2% zinc over 3.0 m. Gold assays were negligible.

GEOLOGICAL MODELS

Payne (1979) outlined a geological model for the Ericksen-Ashby claims based on a brief examination of the Tulsequah Chief and Big Bull mines. suggests that these ore bodies are volcanogenic, massive and disseminated sulphide deposits associated with rhyolite which has been altered to quartz. sericite, and pyrite. They contain abundant massive pyrite lenses, some of which appear bedded. Coarse felsic volcanic breccias, with fragments up to cm across, comprise a thick section west of the Tulsequah Chief mine, and suggest proximity to a volcanic vent. The data also fits an alternative geological model which may be useful in predicting potential economic mineralized zones. A brief literature search was made of calcic zinc/lead skarn deposits with a review of some of the better known deposits. mineral assemblages define either magnesian skarn (i.e., dolomite replaced by forsterite and serpentine) or calcic skarn (i.e., limestone replaced by Fe/Ca silicates such as andradite [garnet group] and hedenbergite [diopside series]). Deposits can then be classified on the basis of the dominant metals. Magnesian skarn deposits of zinc/lead are notably sparse. The following description is from Einaudi, Meinert, and Newberry (1981):

Calcic Zn/Pb skarn deposits form in the middle to late orogenic stages of continental margin belts and are associated with granodioritic to granitic magmatism. These skarns are characterized by their occurrence along structural or lithological contacts at some distance from plutonic contacts, high pyroxene to garnet ratios, distinctive Mn- and Fe-rich minerals (e.g., early johannsenitic pyroxene, minor andratitic garnet, and late bustamite, rhodonite, dannemorite, and ilvaite), and the association of significant amounts of sulphides (e.g., sphalerite, galena, pyrite, pyrrhotite) with pyroxene rather than with garnet or other silicate minerals. Variations within this class may be related to distance from causative plutons; proximal Zn/Pb skarns are less Mn-rich, contain more sulphides in skarn than in limestone replacement ore, and display higher garnet to pyroxene ratios and lower Pb to Cu ratios than do Distal Pb/Zn skarn deposits commonly contain the distal skarns. bulk of ore in carbonate gangue beyond the skarn zone and may be linked with certain manto and vein deposits of Pb/Zn/Ag. An important factor in the formation of Zn/Pb skarn deposits is the gravel distance of hydrothermal fluids between source and reactive limestone, which results in depletion of fluids in Mg, Al, and Cu, and relative enrichment in Mn, Fe, Zn, and Pb.

In a general sense, skarn deposits can be classed on the basis of calc-silicate and iron oxide associations on a scale toward increasing oxidation state, with some W and Sn skarns at the reduced end and some Fe and Cu skarns at the oxidized end. Correlation between this scale and the sulphidation state of associated sulphides is suggested by the trend from pyrrhotite, native bismuth, and arsenopyrite in the more reduced skarns to large amounts of pyrite in the more oxidized skarns.

The major unifying feature of skarn deposits is their evolutionary style. Underlying the variation in metal content, magma association, tectonic setting, and mineralogy described above is a common pattern consisting of (1) essentially isochemical contact metamorphism accompanying emplacement of magma; (2) metasomatic skarn formation and initial ore deposition accompanying crystallization of the magma, initial cooling of the pluton, and evolution of an ore fluid; and (3) retrograde alteration and continued ore deposition accompanying the final cooling of the system. Mineral zoning patterns of each successive stage commonly crosscut earlier patterns as a consequence of shifting hydrothermal conduits during structural evolution. Metasomatic minerals commonly overgrowths on, or veinlets in, metamorphic minerals, and these in turn may break down to polymineralic mixtures during retrograde The degree of development of any given stage varies alteration. widely between classes. Thus, the metamorphic stage is more intense in mesozonal skarns located at pluton contacts (e.g., W skarns) than in epizonal skarns located at some distance from plutons (e.g., distal Zn/Pb skarns). On the other hand, the retrograde stage is more intense in epizonal skarns located at stock contacts (e.g., porphyry Cu skarns) than in epizonal distal skarns (e.g., Zn/Pb skarns) or in mesozonal skarns (e.g., W skarns).

Zinc/lead skarn deposits typically have 6%-12% Zn, lesser Pb, negligible Cu, and from 1 to 9 oz/ton Ag. Some are mined for their silver content alone with ore coming from replacement deposits in limestone beyond skarn. Distinctive features include manganese, iron-rich mineralogy, distal occurrence from intrusive contacts, structural or lithological contact control, absence of metamorphic aureoles, association of significant amounts of sulphide mineralization with pyroxene rather than garnet, and retrograde mineralogy. Evidence from skarns that formed near dykes suggests that the dykes served as structural pathways and that the source of metasomatic solutions was a deeper cogenetic magmatic body. Alteration of dykes associated with zinc skarn includes epidote, garnet-idocrase, sericite, clay, and topaz. Skarns form sheaths around the dyke but may spread along faults and bedding for significant distances in limestones and may form massive sulphide replacements, chimneys, and mantos.

GEOLOGICAL MAPPING AND ROCK CHIP SAMPLING

Detailed geological grid mapping at 1:1,250 scale (Map 2a) was carried out on the Grizmo Grid west of the Bracken Fault on Map 1 (Payne, 1979). Partial detailed mapping at 1:1,250 scale was carried out on the Club Grid (Map 3a) north of the Grizmo Grid and south of the Taku River. Steep topography in many cases prevented regional traverses; however, cliffs afforded rock sampling of gossans by climbers using ropes and specialized climbing equipment. In addition, 49 silt samples were taken for regional follow-up since sampling by rock climbers was very site-specific, time consuming, and required helicopter access.

Grizmo Grid

Detailed geological grid mapping at 1:1,250 scale focused on mapping of lithological contacts and locating trenches. The grid was used to relate to Payne's 1979 mapping and the results of the 1987 geochemical and geophysical surveys.

Mapping has delineated a complex of northeast trending faults between L.5+00N and L.0+00. The result is an interaction and dislocation of northwest trending sedimentary units into northeast trends. This produces local complex folds with massive sulphide type mineralization concentrated in both trends.

These structures may be important in localizing chimney-type mineralization striking in a northeast direction. Drilling in a northeast direction would not develop any continuity to the mineralization. An example of this would include mineralization in Zone 4. Between L.3+00N and L.0+00, a wedge of limestone has been faulted away from the main sedimentary unit. This site corresponds to a strong geochemical anomaly. At L.7+00N 0+25W, another similar dislocation occurs and corresponds to Zone 10.

Variability of trends and shapes of gossans can be seen in the north face of Mellow Yellow Zone (see Figure 17), located northeast of Zone 12.

Club Grid

The grid was located to determine if there was any any structural or stratigraphic continuity from Yellow Bluff or Zone 7 respectively. Lines 4+00N and 3+00N were mapped. Topography is controlled by the degree of silicification which increases away from the base line. Fractured andesite and chert with pyrite and limonite were located in creek beds and may correspond to weakly anomalous silver values.

<u>Little Gunsite Zone</u> (Figures 11 and 12)

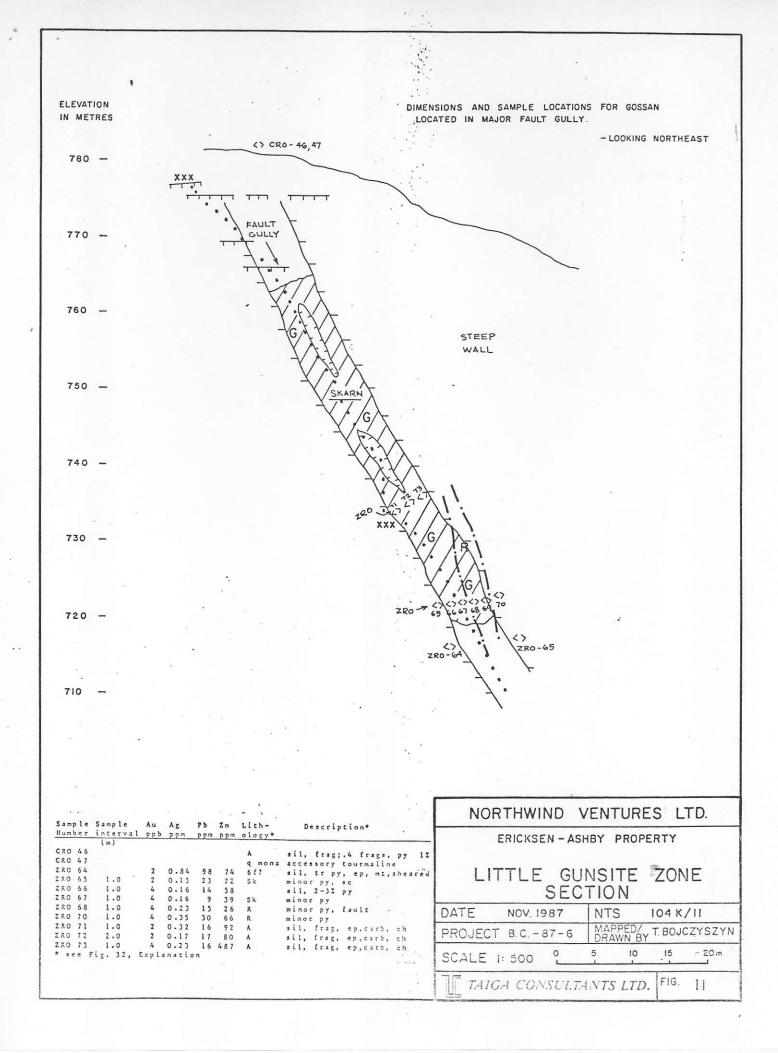
A series of rhyolite dykes(?) cut through silicified andesite fragmentals with chert and disseminated pyrite. One anomalous sample (487 ppm Zn) is peripheral to the rhyolite while the other is within the rhyolite (4.6 ppm Ag, 128 ppm Pb). The latter is associated with a shear containing pyrite and trace malachite.

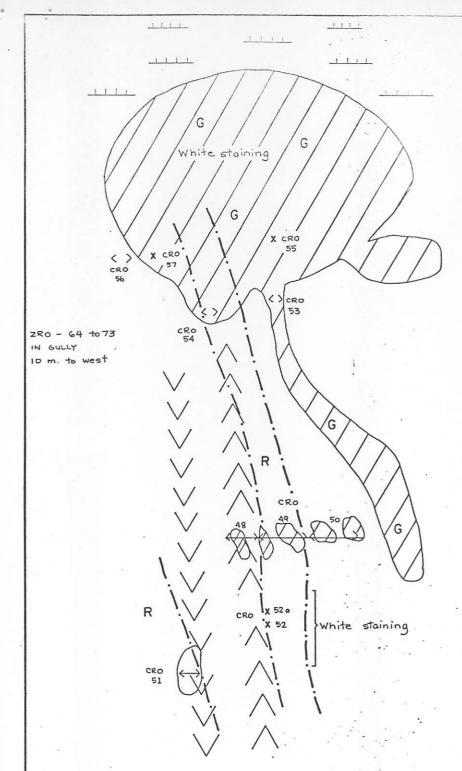
Backsite Zone (Figure 13)

A 15 m wide gossan consisting of altered andesite and skarn with disseminated and fracture-controlled pyrrhotite (up to 4%) was sampled. Weakly anomalous silver values to 0.43 ppm were obtained.

Yellow Bluff Zone (Figure 14)

Yellow Bluff is a steep north-trending gossanous cliff with 330 m of vertical relief from the top to river bottom. An attempt was made to sample the entire section but because of the very siliceous rock, anchors could not





LOOKING NORTHEAST

ALL AREAS OF MINERALIZATION HIGHLY FRACTURED & WEATHERED.

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LITTLE GUNSITE ZONE SECTION

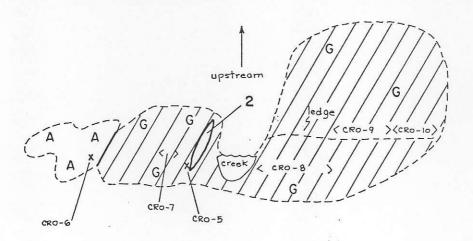
DATE NOV. 1987	NTS 104 K/II
PROJECT B.C87-6	MAPPED/ T. BOJCZYSZYN DRAWN BY
SCALE 1:500	1D 20m
TE TAIGA CONSULT	ANTS ITD FIG. 12

Sample Sample Au Ag -Number interval ppb ppm ppm ppm ology* (m) 1.5 2.5 72 A 55 R 77 A 52 R sil, frag; 4frags 12 py, carb, sc 0.11 CRO 48 0.11 18 72 A sil, frag, 4frags 12 py, carb, sc 0.13 16 55 R diss py 0.16 22 77 A same as 48, 1-22 py, ch, carb 0.07 17 52 R diss py 0.09 16 84 R py, carb fractures 0.47 22 60 A, Sk same as 48, Sk 4.60 128 90 R, Sk 1-22 py, ma, 5 mm cal veins 0.13 15 78 same as 48 0.08 25 81 same as 48 CRO 49 1.25 CRO 50 CRO 51 CRO 52 grab 1.0 1.0 CRO 53 CRO 54 CRO 55 grab CRO 56 grab 4 0.08 2 CRO 57 grab * see Fig. 32, Explanation

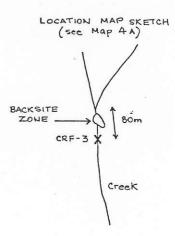
Lith-

Au Ag Pb Zn

LOOKING NORTHWEST



gossan obscured by vegetation



		Sample interval	Au ppb	A g ppm		Zn	Lith- ology*	Description*
		(m)						
CRF :	1						6 E	
CRO S							Sk	(altered A), sil, carb
CRO 6	,						Sk	amygdaloidal, carb.
CRO 7		1.2	6	0.30	18	84	Sk	sil, py, 2% diss po
CRO 8	3	4.0	4	0.40	13	94	Sk	sil, py, 4I diss po
CRO S	1	3.0	6	0.43	1.5	100	Sk	sil, py, frac controlled ;
CRO I	0	2.0	2	0.34	12	107	Sk	sil, py, do, ep,sc,diss
* 120	F	ig. 32, 1	Expla	anatio	n			

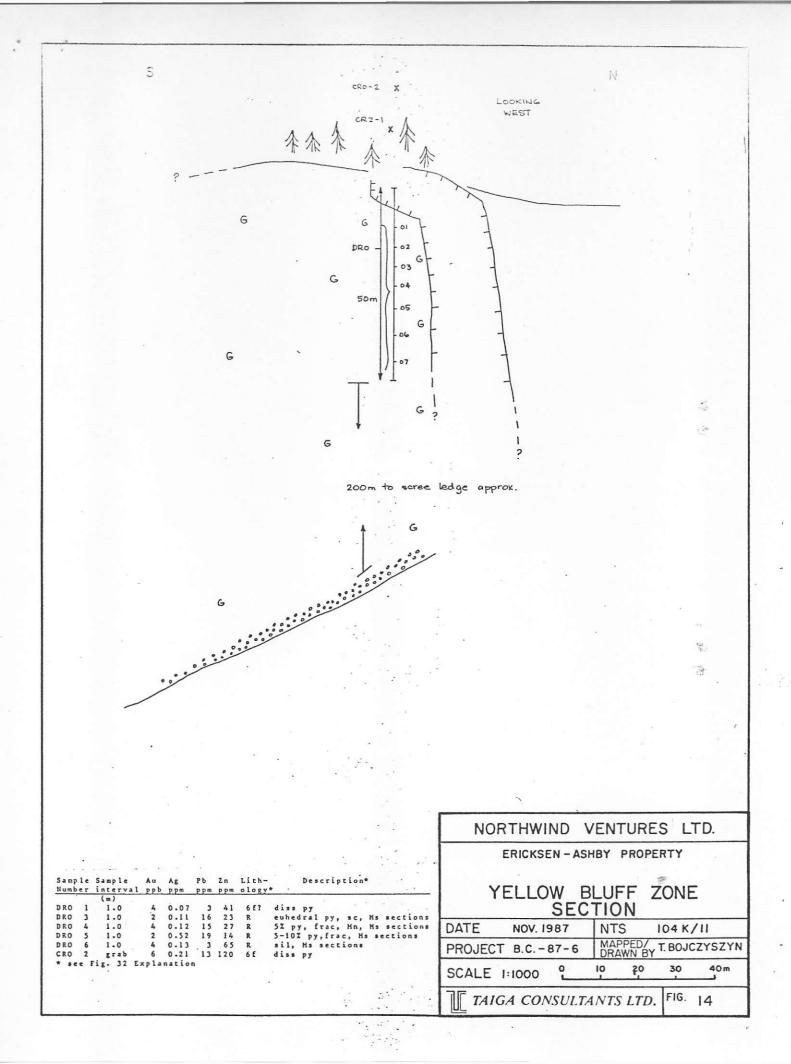
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BACKSITE ZONE SECTION

DATE NOV. 1987	7	NTS	10	4 K/II	
PROJECT BC-87-6	5	MAPPEI DRAWN)/ BY T. B(DJCZYS	ZYN
SCALE 1,200 0	2	4	6	8	10 m

TAIGA CONSULTANTS LTD. FIG. 13



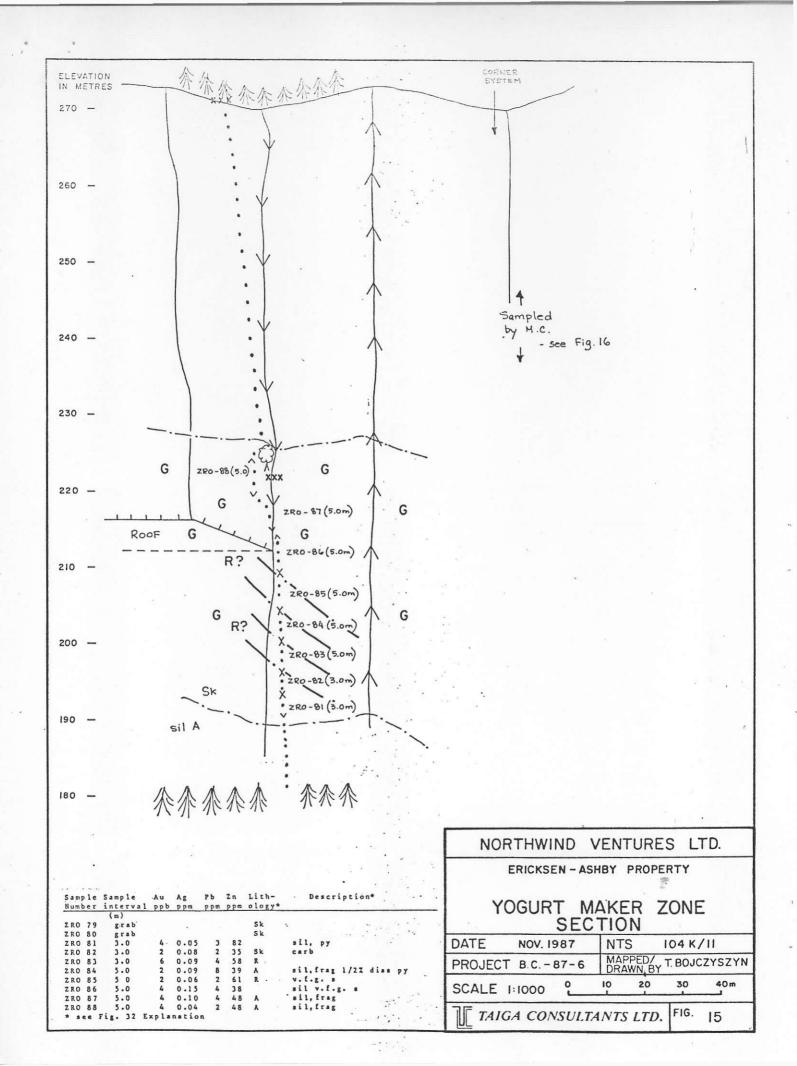
be secured. Hence, only one rope length of exposure was sampled. Narrow sections of massive pyrite were encountered near the contact of the altered intrusive and rhyolite. This contact may be the cause of the six-channel INPUT anomalous previously mentioned. Rhyolite containing 5% to 10% pyrite in fractures yielded an anomalous 0.52 ppm silver value. Similar trending structures (from air photo lineaments) lie 300 and 400 m to the west of Yellow Bluff but lack noticeable gossans.

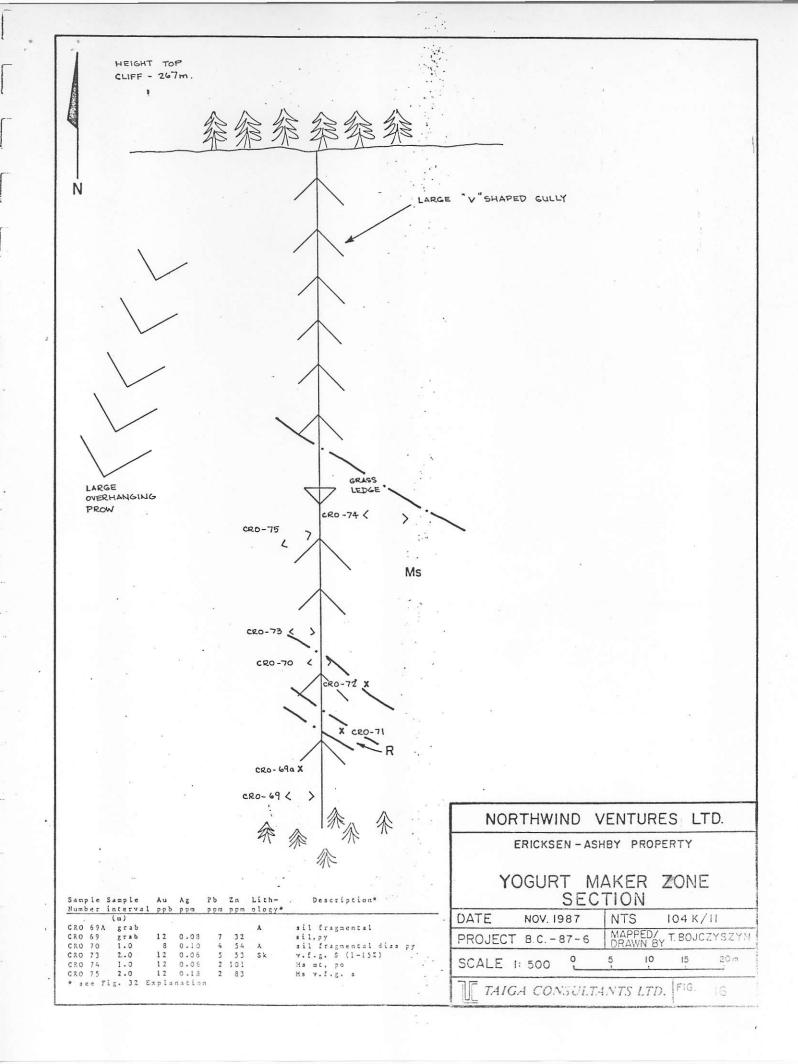
Yogurt Maker Zone (Figures 15 and 16)

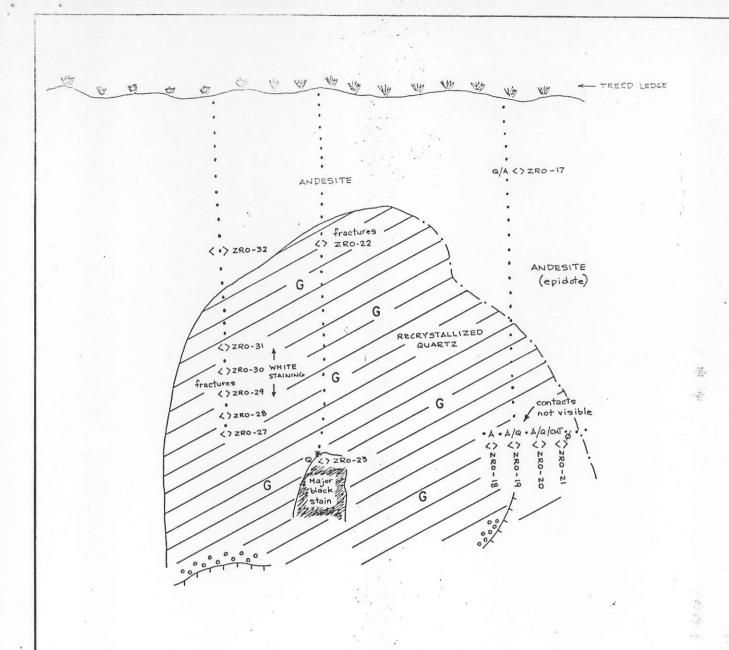
A series of rhyolite dykes(?) cut through silicified andesite fragmentals. Massive sulphide zones and skarns with 1% to 15% very fine-grained sulphides consist of pyrrhotite and include magnetite. Disseminated pyrite occurs in the silicified andesite fragmentals and the rhyolite. None of the samples were found to be anomalous in Au, Ag, Pb, or Zn.

Mellow Yellow Zone (Figure 17)

The sample area is on a north-facing cliff at the end of L.10N on the Grizmo Grid. Gossans are confined to steeply dipping structures to the west (3 m) and lesser smaller structures to the east. In places, irregular gossanous pods 25x90 m can be seen on the vertical face. The host rock consists of andesite, altered andesite (silicified, epidotized), skarn (diopside, garnet, epidote), and quartzite (recrystallized 0.025-0.125 mm quartz). Sections contain 5% to 10% weathered sulphide pods and disseminated pyrite to 1%. Most of the rocks sampled here are anomalous in silver, lead, and zinc, but not gold. White staining observed in trenches with massive sphalerite was also noted and this material yielded the highest zinc value (5100 ppm).







		Sample interval	Au ppb		Pb ppm		Lith- ology*	Description* .
		(m)		-				
ZRO .	17						Q, Sk	
ZRO	18	3.0	6	0.36	155	1010	Sk	s, dc, ga, pz
ZRO .	19	3.0	4	0.21	44	130	Sk,Q	s,dc,ep,pz,brecciated
ZRO :	20	3.0	14	0.70	61	161	Q _	s, pz,
ZRO :	21	3.0	4	0.68	62	26	Q ·	ga
ZRO :	22	3.0	4	1.90	183	510	Q	pz .
ZRO :	23	3.0	2	1.22	165	590	Q -	s 5-10%, pz
ZRO :	27	3.0	6	0.68	112	500	Q	dc, pz
ZRO :	28	. 2.0	4	1.87	300	1010	Q, Sk	s, py, dc, ga, pz, sil
ZRO :	29	3.0	16	3.90	920	990	Q	dc, pz, lm, sc
ZRO :	3 0	3.0	22	7.00	1270	5100	Q	1% diss py, dc,pz
ZRO :	3 1	3.0	8	5-30	770	1530	Q	s, diss, pz, lm, sc
ZRO	3 2	3.0 .	10	0.20	4	140		
* se	e F	ig. 32 E	xplan	nation	1			

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MELLOW YELLOW ZONE SECTION

DATE NOV. I	987	NT	S	104 K	/11 -
PROJECT B.C	87-6	MAP DRA	PPED/	T. BOJC	ZYSZYN
SCALE I: 500	0	5	ıb	15	20m
76				Tric	

TAIGA CONSULTANTS LTD. FIG. 17

Zone 4 (Figure 18)

Values for Au, Ag, Pb, and Zn tend to be higher on both contacts and includes the highest silver value (62.0 ppm or 1.80 oz/ton). Weathered samples may decrease the overall values. Mineralization appears to be controlled by strong intersecting fractures.

Zone 8A (Figure 19)

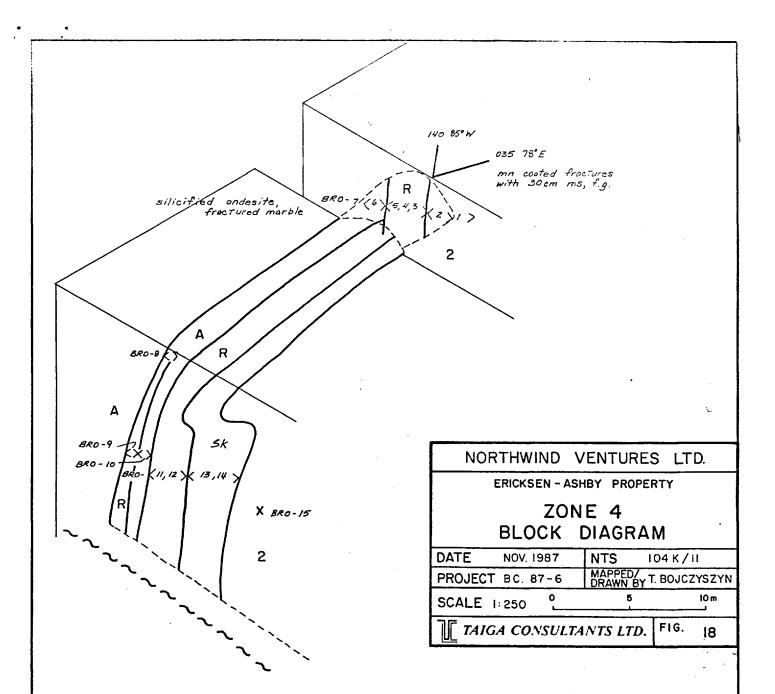
This complex zone was sampled between trenches 8A-3 and 8A-4. One of the samples analyzed 0.068 oz/ton Au (2320 ppb), 47.26 oz/ton Ag (1620 ppm), 6.1% Pb, and 1.78% Zn, and compares to some high questionable assays from Ericksen-Ashby (see Table below). Folding or faulting may be localizing high-grade shoot mineralization.

after Payne, 1979

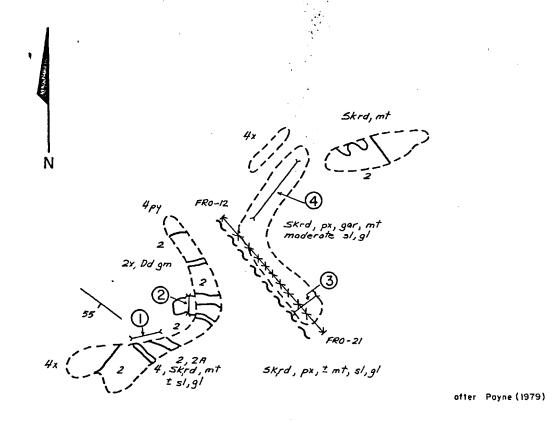
<u>Sample</u>	<u>Width</u>	oz/T Au	oz/T Ag	% Pb	% Zn	Description	Source
8A-1 8A-2 8A-3 8A-4	6.1' 4.0' 5.0' 20.0'	0.02 0.008 0.047 0.010	19.2 ? 1.7 37.2 ? 1.1	7.2 ? 0.9 12.4 ? 0.03	2.8 2.1 5.4 1.3	Sk,4,2 Sk,2 Sk(gl,sl) Sk	E.A. E.A. E.A.

Zone 7 (Figure 20)

Folded 10 m gossanous bands of chert, skarn, and marble contain sections of up to 2% disseminated pyrite and, in places, weathers black due to fractured manganese staining. Trace malachite was observed. No anomalous values for Au, Ag, or Pb were obtained. Sample ZRO-11 (marble) is anomalous in Zn (760 ppm).



	Sample interva	Au	-	Pb ppm	Zn I	lith- logy*	Description*
umber		1 ppu	b b m	P P III		,1057	
BRO 2	(m) 1.0	.6	22.0	2300	3000	•	Ms sl,po,lm,pz,sil,dc,strg frac
BRO 2	A grab	24	25.0	5100	6100		Hs po, mu pz
3 RO 3	-	2	2.9	330	680		py, sil, lm, pz, sc, wthrd along frac, strg ox, sid patches
3RO 4		6	0.63	104	200	4	pz,carb, lm,dc veins
BRO 5	1.7	6	20.0	3900	3900	R? 4	py, sc, pz highly frac
RO 6		6	20.0	2300	2300	R 4	Marble, lm, pz, dp, ga, ep, frac controlled, white staining
BRO 8		12	10.2	2400	8000	A	sil f.g. s,sl, pz, Mn
BRO 9		4			12500	R	diss po 5%, carb, dp, ga, sl in frac
BRO 10		12	13.6	3300	5100	A	sil, py, po, wthrd, lm, sc, ga, dc, highly frac
BRO 11		36		6800	6900	R .	10% diss py, lm, pz,sil,ga frac
BRO 12		74		6700	4900	R	streaks v.f.g. s,po 15%, pz, lm, q, dc
BRO 13		38	47.0	8600	8700	Sk	Ms,pa,lm, pz, gl
BRO 14			62.0	10500	9800	Sk	20% s, po, gl, pz, sections 5% sl, highly wthrd
	Fig. 32	Expla	nation				
					•		•



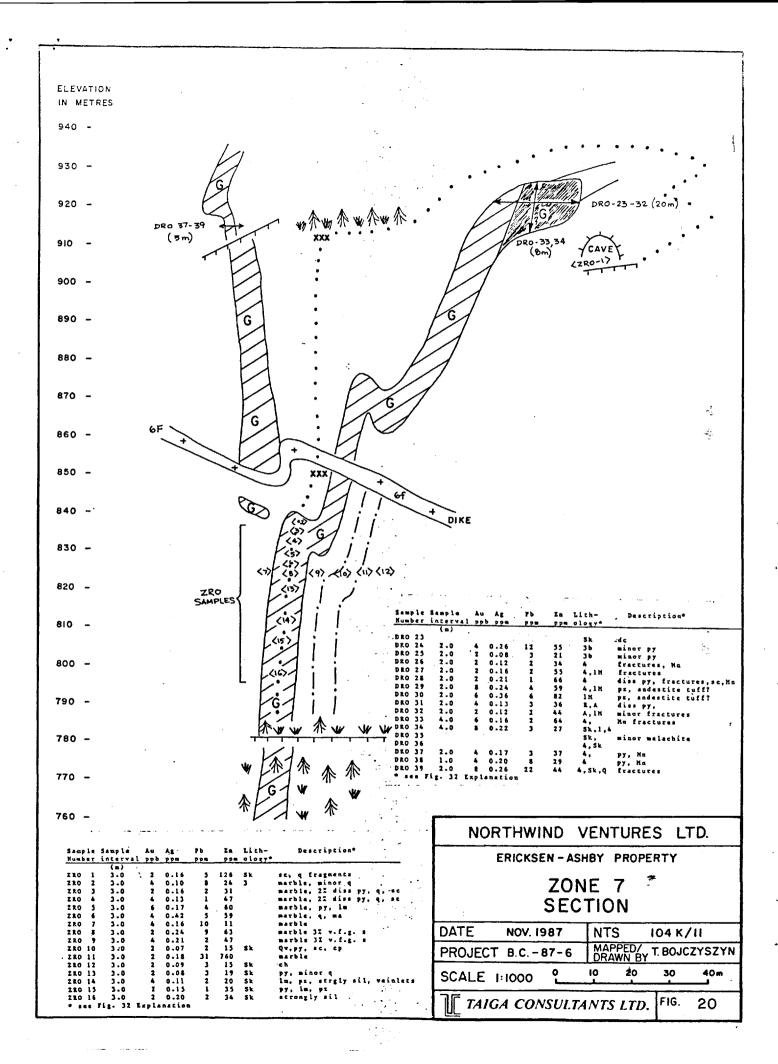
			. •			-		
Sampl	e	Sample	Αu	Ag	Pb	Zn	Lith-	Description*
Numbe	ť	interva	l ppb	. ppm	ppm	ppm	ology*	
		(m)						
FRO 1	2	2.0	260	48.0	3700	14000	Sk	v.f.g. s,sil carb
FRO 1	3	1.0	168	51.0	5900	20000	Sk	py, gl, dol, sil
FRO 1	4	1.0	114	36.0	2700	14600	\$k	ga, ro, sl,dol
FRO L	5	1.0	412	81.0	8000	15100	5 k	mt, Mn
FRO 1	6	1.0	220	56.0	5000	14900	Sk	ga .
FRO 1	7	1.0	362	95.0	4800	17400	Sk	
FRO 1	8	1.0	2320	1620.0	61000	17800	Sk	60% s, coarse gl, po, mt?
FRO 1	9	1.0	224	43.0	2200	7900	Sk	carb, mt rimming cal
FRO 2	0	1.0	278	94.0	4300	12100	Sk	veins, specks gl, carb, sil
FRO 2	1	2.0	30	28.0	580	3800	Sk	diss py 3-4%

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ZONE 8A MAP

DATE NOV. 1987	1	04 K / II					
PROJECT BC. 87-6	MAPPED/ DRAWN BY	BOJCZYSZYN					
SCALE 1:600 0	5	10 m					
TE TAIGA CONSTITANTS LTD FIG. 19							



Zone 1 (Figure 21)

A comparison of drill results and surface sampling shows an increase in silver grade and width with depth. In addition, gold apparently becomes anomalous towards the limestone contact.

<u>Sample</u>	<u>Interval</u>	Au oz/ton	Ag oz/ton	Pb %	Zn %
DDH 81-3	9.2 m		16.54	4.94	4.22
DDH 81-4	5.1 m		18.30	6.42	6.20
DRO 42-48	14.0 m	0.003	1.95	1.16	1.7
DRO 48	2.0 m	0.008	7.0	5.5	5.1

Zone 6 (Figure 22)

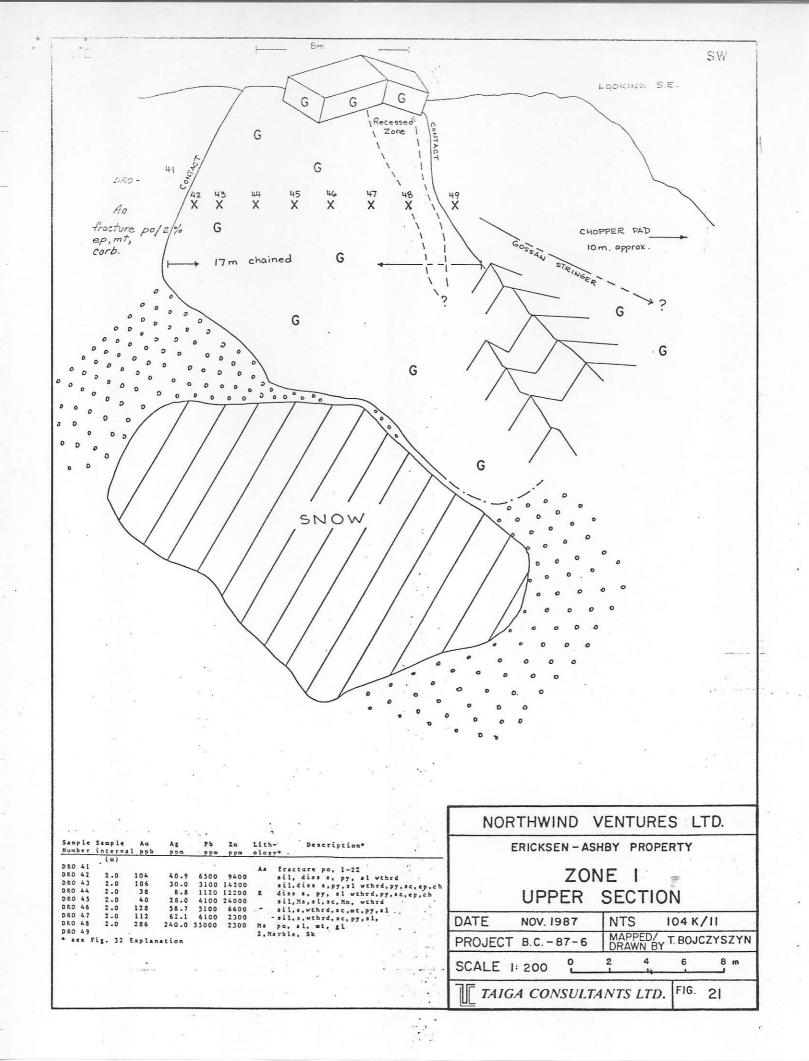
The best silver values are found toward the marble contact (82.8 ppm, 2.42 oz/ton) but do not compare to the 24.2 oz/ton reported by Ericksen Ashby (Trench 6-1). Surface samples consisted of highly oxidized material.

Zone 2N (Figure 23)

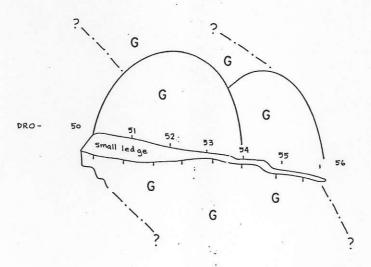
This zone consists of massive sulphide with rhyolite. The best silver values (12.83 oz/ton) occur near the western contact with the limestone (which locally includes chert fragments). A one-metre interval averages 105.4 ppb Au, 97.33 ppm Ag, 1.24% Pb, and 2.18% Zn.

Zone 2 - Glory Hole (Figure 24)

This zone was briefly examined, sampled, and mapped. Massive sulphide and skarn samples yielded anomalous gold values from 204 to 746 ppb. Of particular interest here are samples taken by Cominco in 1951 (Table 2). One set yielded 0.11 oz/ton Au (3767 ppb), 15.6 oz/ton Ag, 4.4% Pb, and 3.8% Zn over 35 feet. Another sample assayed 0.4 oz/ton Au (13,698 ppb), 16.3 oz/ton Ag, 0.8% Pb, and 0.2% Zn over 5 feet. Payne (1979) questions the accuracy of these values but results from previous zones have often returned



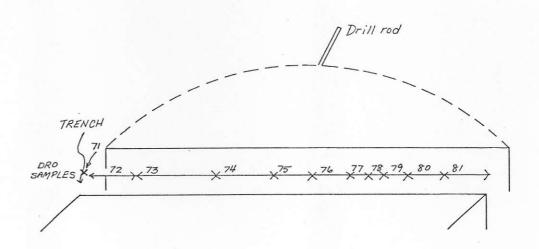
Looking S.E.



		Sámple interval			Pb Ppm		Lith- ology*	Description*	
		_ (m)					20 (200)		
DRO	50	grab					4 , S k		
DRO	51	2.0	36	21.0	2200	18000	4 , Sk.	sl, sections Hs carb	i.
DRO	52	2.0	104	13.0	1260	7900	R	Mn, sl, sections Ms, carb	
DRO	53	2.0	78	31.0	700	28000		wthrd gl,sl,sc, sections Ms ca	rb
DRO	54	2.0	152	39.0	3500	52000	R(wthrd)		
DRO	55	2.0	58	82.8	11300	5800		f.g. gl,sl sc, Mn, v.f.g., Ms	
DRO	56	grab						marble	

NORTHWIND VENTURES LTD. ERICKSEN - ASHBY PROPERTY ZONE 6 SECTION DATE NOV. 1987 NTS 104 K/II PROJECT B.C. - 87 - 6 MAPPED/DRAWN BY T. BOJCZYSZYN SCALE 1:1000 10 20 30 40m TAIGA CONSULTANTS LTD. FIG. 22

LOOKING SOUTH



	Sample interva		Ag ppm	Pb ppm		Lith- ology*	Description*
DRO 71 DRO 72 DRO 73 DRO 74 DRO 75 DRO 76 DRO 77 DRO 78 DRO 79 DRO 80	(m) grab 1.0 2.0 1.5 1.0 0.5 0.5	6 8 6 8 6 4 5 4 3 0 2 1 1 3 8 1 1 4 9 8	2.90 4.20 61.8 43.7 24.0 00.0 86.8	410 830 11100 8800 4200 9000 7200 17700 6600	3600 5600 31000 58000 37000 11200 18500 29000 24000 3500	2 2,4 R, Ms R, Ms Hs Hs	py, s1 sil,sl fractured,gl Hs sections sil,coarse sl,sb gl,py py, sl, ghostly white feldspars? py, sl py, sl py, sl 4mm veinlets gl,py;Hs sl,py sil,gl,chert fragment
DRO 81		72	73.3	4000	350	2	sii,gijenere reagment

NORTHWIND VENTURES LTD. ERICKSEN - ASHBY PROPERTY ZONE 2N BLOCK DIAGRAM DATE NOV. 1987 NTS 104 K/II PROJECT BC 87-6 MAPPED/ DRAWN BY T. BOJCZYSZYN SCALE 1:100 0 1 2 3 4m TAIGA CONSULTANTS LTD. FIG. 23

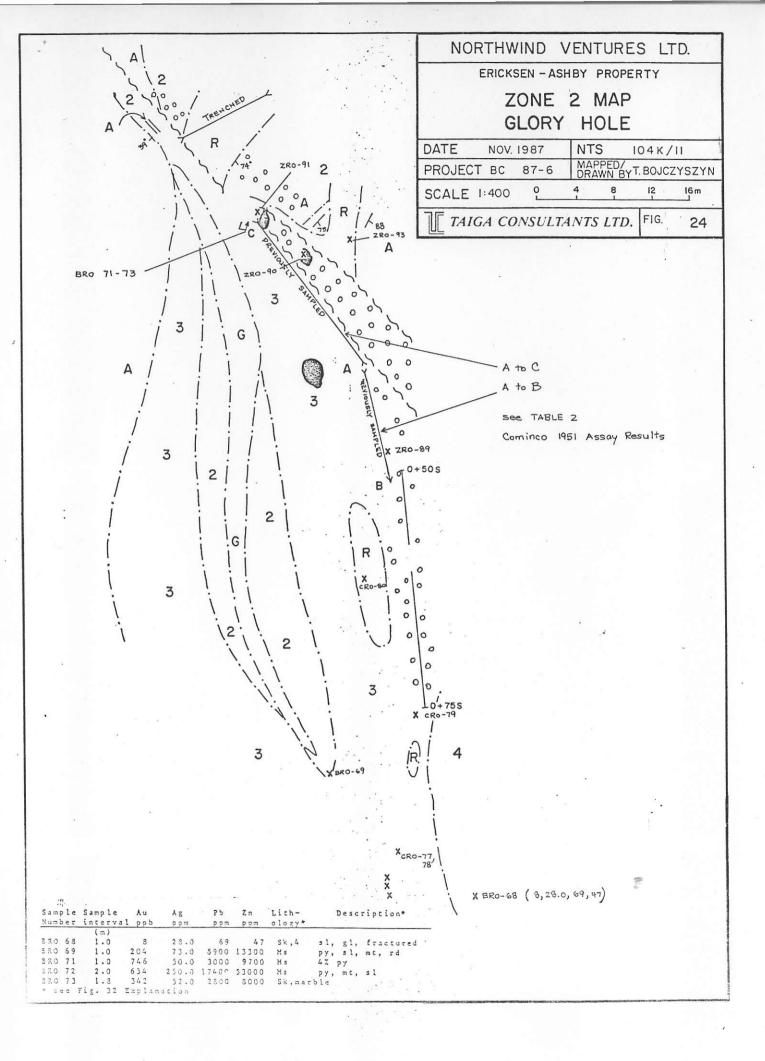


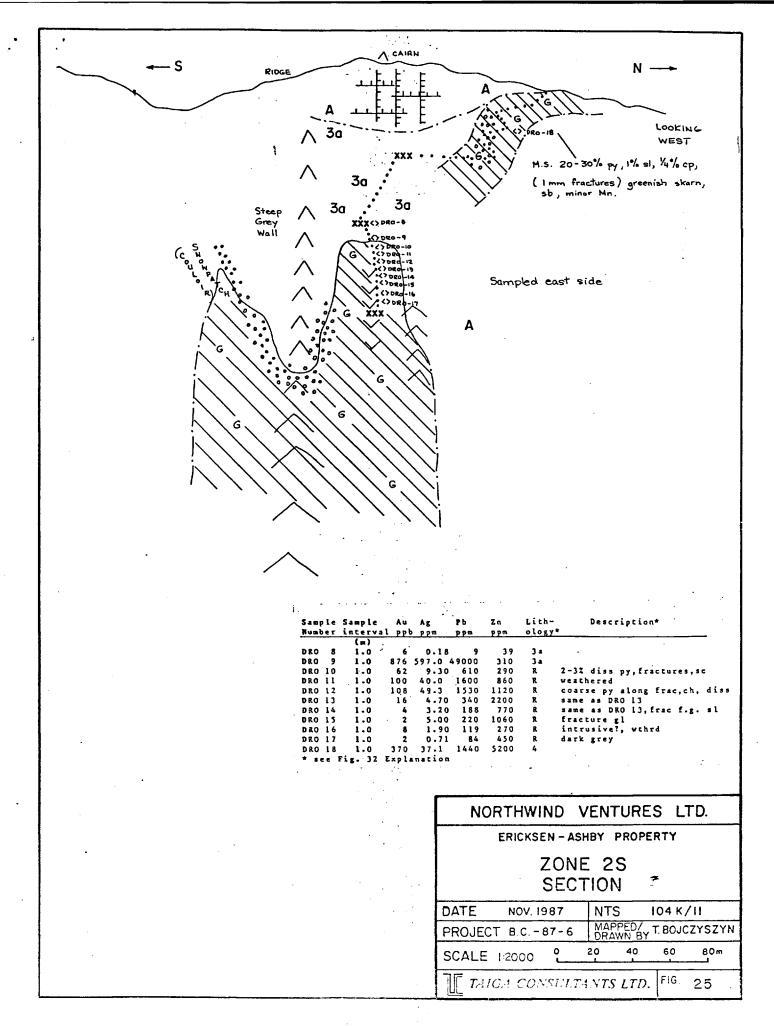
TABLE 2 - COMINCO'S 1951 ASSAY RESULTS

Line A-C	1ntercepts 0- 5 5- 10 10- 15 15- 20 20- 25 25- 30 30- 35 35- 40 40- 45 45- 50 50- 55 55- 60 60- 65 65- 75 75- 95 95-110 110-120	oz/T Au 0.08 tr tr 0.10 0.04 0.02 0.02 0.02 0.06 0.02 0.10 0.10 0.10 0.10 0.10 0.10 0.10	oz/T Ag 20.4 2.8 6.6 10.5 16.9 5.8 3.6 3.3 13.6 9.9 16.2 23.6 4.7 16.3 20.1 11.1 4.2	<pre>% Pb 1.7 0.0 0.7 1.9 1.0 tr 1.4 0.5 2.8 0.7 4.4 0.7 0.9 0.8 4.3 4.5 0.1</pre>	<pre>% Zn tr 0.2 0.3 3.0 1.3 0.3 5.2 0.5 0.2 0.7 tr tr 1.8 0.2 6.1 1.5 2.4</pre>
average	0-120	0.09	11.3	1.9	1.7
Line A-B	0- 12 12- 20 20- 30 30- 36 36- 45 45- 55 55- 65 65- 85 85-100 100-110 110-125	0.08 tr tr tr tr tr tr tr tr 0.02 0.08 tr tr	17.7 5.4 2.0 4.3 7.9 1.8 6.0 7.2 2.3 4.7 4.9	1.0 0.3 tr 0.6 1.5 tr 0.3 2.7 0.0 2.0	0.3 1.2 1.5 2.8 0.3 0.5 0.2 0.7 tr 0.4 0.2
average	0-125	0.02	6.0	1.0	0.6

higher gold values approaching the limestone contact with comparatively low Pb and Zn values.

· <u>Zone 2S</u> (Figures 25, 26)

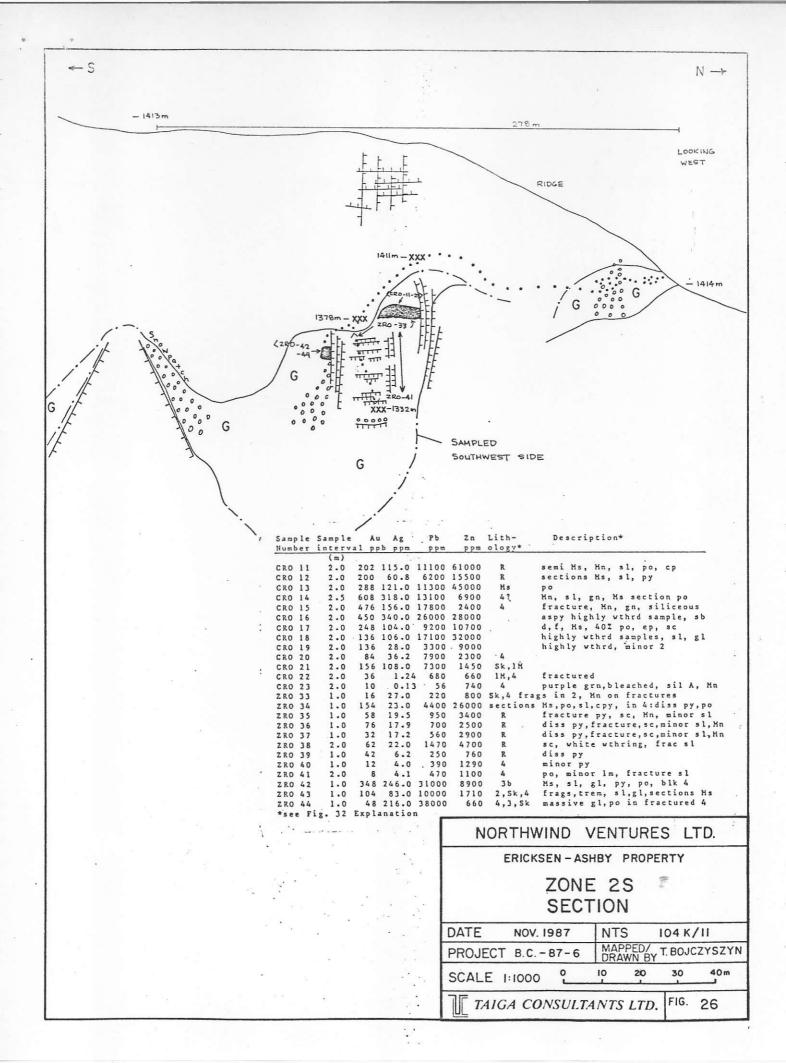
The best mineralization as shown in Figure 25 occurs near the interbedded limestone-chert and rhyolite contact. Sample DRO-9 includes 876 ppb



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Au (0.025 oz/ton), 597.0 ppm Ag (17.41 oz/ton), and 4.9% Pb; or 0.33 oz/ton gold equivalent. A 22 m chip sample interval over black weathering, manganese stained rhyolite and chert (with massive sulphide sections) averages 271 ppb Au (0.0078 oz/ton), 136 ppm Ag (3.96 oz/ton), 1.18% Pb, and 1.95% Zn) or 0.12 oz/ton gold equivalent (see Figure 26). Higher gold values occur within chert.

<u>Inspiration</u>) (Figure 27)

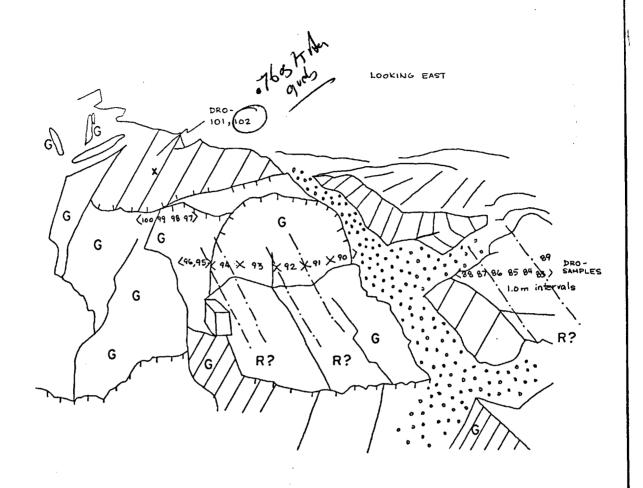
A series of rhyolite dykes(?) cot through silicified andesite. Anomalous Au (106 to 26,200 ppb; 0.76 oz/ton) values occur within or peripheral to rhyolite often accompanied by disseminated pyrite. Pb and Zn values are negligible; however, one anomalous Au sample (106 ppb) was also anomalous in Ag (1.61 ppm).

Wild West (Figure 28)

Sampling of a fine-grained sericite-altered intrusion and/or rhyolite produced slightly anomalous values for Au (106 ppb) and silver (0.50 ppm). Fractured and disseminated pyrite included sections of 2% to 3%, 5%, and 5% to 15%. Anomalous gold-in-soil samples were taken on this ridge to the west (see Map 4a).

Green Crop (Figure 29)

Feldspar porphyry and/or altered andesite feldspar porphyry is in contact with skarn. The skarn is fractured and contains malachite, 1% to 2% disseminated pyrite, or may have massive pyrite sections to 80%. Highly anomalous gold values (to 2320 ppb Au and 13.8 ppm Ag) occur with malachite and pyrite mineralization.



· i		Αu	Ag	Pb	Zη	Lith-	
	nterval	ppb	ppm	ррпа	ррпа	ology	, *
	(a)						
3 3	1.0	106	1.61	22	2.5	R	po, sc
14	1.0	364	0.72	16 -	2 1		py, ful
3 5	1.0	58	0.30	10	26	R	ро
3 6	1.0	54	0.30	7	22		52 py
3 7	1.0	12	0.27	10	39	A	*il
_		6	0.18	5	89	A	sil, py, po
		24	4.33	16	46	A	sil, py, po
		22	0.42	88	77	A	sil, py
			0.31	28	47	A	sil,py
			0.24	7	3 2	f.g.	intrusive? py
				6	29	_	
				5	21	R	
					19		
					34		sil, py
							sil, py, mt, ep
							sil, py, mt, e
							sil, py, ful
-							sil, py, mt, e
							sil, py,
							sil, py, ep
				_			
	3456788901234567890002	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	34 1.0 364 35 1.0 58 36 1.0 58 38 1.0 12 88 1.0 6 89 \$r=b 24 90 2.0 72 91 1.0 72 92 2.0 36 99 2.0 54 99 2.0 128 99 1.0 68 99 1.0 68 99 1.0 68 99 2.0 142 99 2.0 142 99 2.0 142 99 2.0 24 00 1.0 24 00 1.0 24 00 2 \$r=b 26200	364 0.72 35 1.0 58 0.30 36 1.0 54 0.30 37 1.0 12 0.27 38 1.0 6 0.18 39 grab 24 0.33 90 2.0 22 0.42 91 1.0 72 0.31 92 2.0 54 0.27 94 2.0 128 0.28 95 1.0 46 0.20 96 1.0 56 0.39 97 1.0 56 0.39 98 2.0 142 0.88 99 2.0 78 0.29 00 1.0 24 0.56 01 grab 58 0.32 02 grab 26200 14.8	34 1.0 364 0.72 16 35 1.0 58 0.30 10 367 1.0 12 0.27 10 388 1.0 6 0.18 5 389 2.0 2.0 22 0.42 88 91 1.0 72 0.31 28 91 2.0 36 0.24 7 93 2.0 54 0.27 6 94 2.0 54 0.27 6 95 1.0 68 0.17 9 96 1.0 56 0.19 3 98 2.0 142 0.85 11 99 2.0 78 0.29 4 001 2.0 24 0.85 20 01 27 0.22 2	34 1.0 364 0.72 16 21 85 1.0 58 0.30 10 26 86 1.0 54 0.30 7 22 87 1.0 12 0.27 10 39 88 1.0 6 0.18 5 89 89 grab 24 0.33 16 46 90 2.0 22 0.42 88 77 91 1.0 72 0.31 28 47 92 2.0 36 0.24 7 32 93 2.0 54 0.27 6 29 94 2.0 128 0.28 5 21 95 1.0 68 0.17 4 34 97 1.0 56 0.39 3 38 98 2.0 142 0.85 11 29 99 2.0 78 0.29 4 15 00 1.0 24 0.56 3 37 01 grab 58 0.32 2 02 grab 26200 14.8 2 Fig. 32 Explanation	34 1.0 364 0.72 16 21 85 1.0 58 0.30 10 26 R 61.0 54 0.30 7 22 88 7 1.0 12 0.27 10 39 A 68 1.0 6 0.18 5 89 A 68 9 grab 24 0.33 16 46 A 6 99 2.0 20 22 0.42 88 77 A 691 1.0 72 0.31 28 47 A 692 2.0 36 0.24 7 32 f.g. 99 2.0 36 0.24 7 32 f.g. 99 2.0 46 0.20 4 19 99 2.0 46 0.20 4 19 99 2.0 46 0.20 4 19 99 2.0 68 0.17 4 34 99 7 1.0 56 0.39 3 38 98 2.0 142 0.85 11 29 99 2.0 78 0.29 4 15 0.0 1.0 24 0.56 3 37 01 grab 58 0.32 2 20 22 grab 26200 14.8 2 24 Fig. 32 Explanation

NORTHWIND VENTURES LTD.

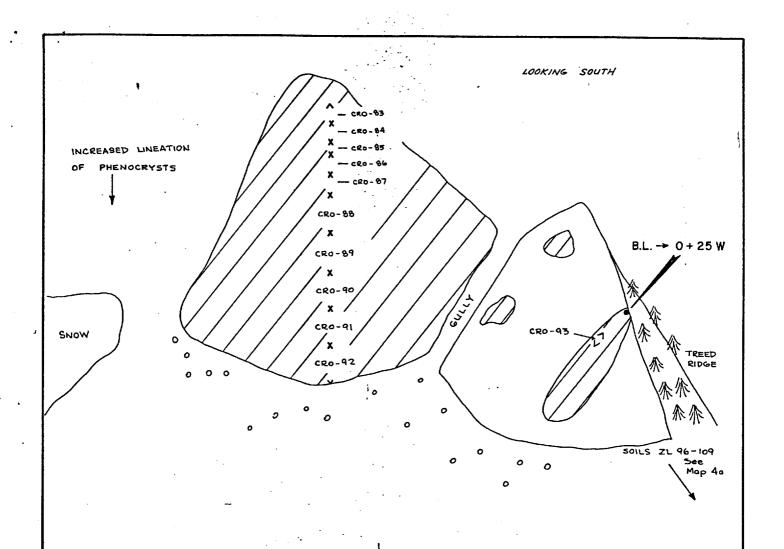
ERICKSEN - ASHBY PROPERTY

INSPIRATION ZOME SECTION

DATE NOV.		1	K/II
PROJECT BC.	87-6	MAPPED/ DRAWN BY T. BO	JCZYSZYN
SCALE 1:250	o.	5	10 m

27

TAIGA CONSULTANTS LTD. FIG.



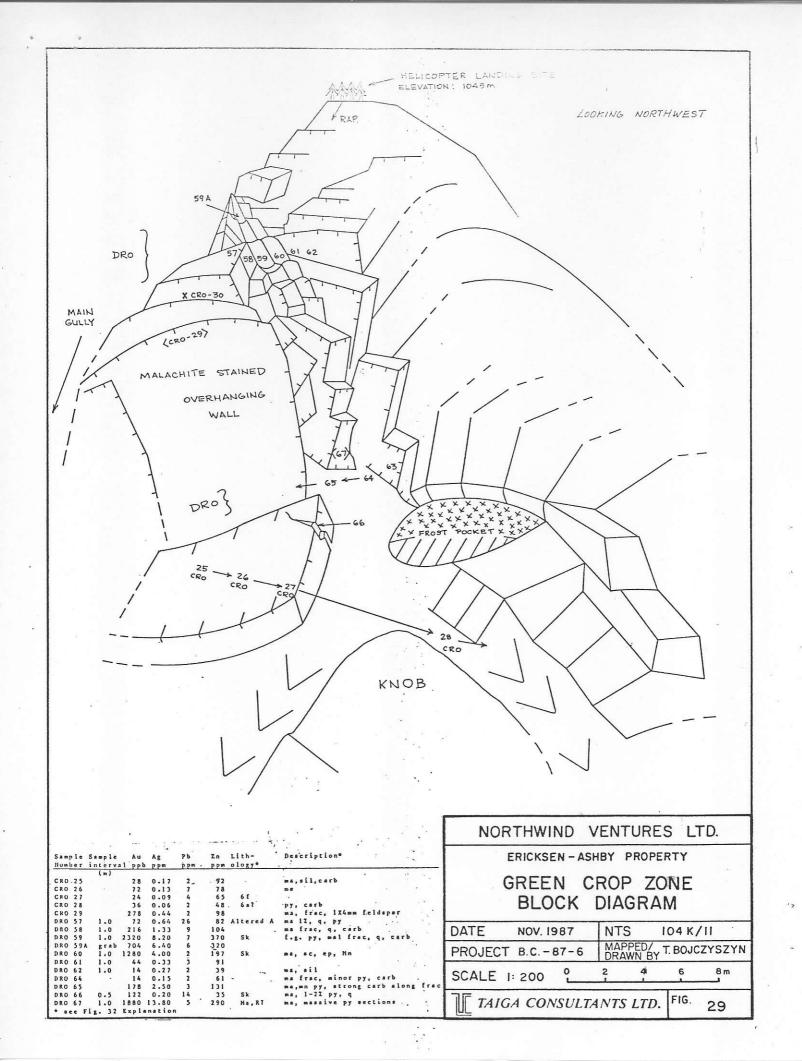
								3
Sample Number				Pb ppm		Lith- ology*	Description*	:
Humber) (m)		P F			-		_
CRO. 83	2.0	52 -	0.11	2	31	f.g. alte	red intrusive, 15% py, sc	;
CRO 84	2.0	106	0.50	ì	49			
CRO 85	2.0	96	0.43	2	68		sil, p, py	
CRO 86	4.0	26	0.27	2	72	R7	py, sc	
CRO 87	5.0	18	0.17	4	86	oil A	frag, 2-3% py	;
CRO 88	10.0	54	0.36	2	72	sil A	fræg,5% þy	
CRO 89	10.0	4 2	0.31	· 1	55		sil, py	
CRO 90	10.0	6.2	0.28	2	60		sil, py	
CRO 91	10.0	34	0.16	1	86		sil, sheeted frac, 2-3% py	
CRO 92	10.0	. 36	0.16	3	77		*it	
CRO 93	2.0	28	0.12	1	. 47		sil, 27 py	
* sec	Fig. 32	Expla	nation					

NORTHWIND VENTURES LTD.

ERICKSEN - ASHBY PROPERTY

WILD WEST ZONE SECTION

DATE NOV. 1987	NTS	104 K/II	
PROJECT B.C87-6	MAPPED/ DRAWN B	, T. BOJCZY	SZYN
SCALE 1:1000 C	10 20	30	د
TAIGA CONSULTA	INTS LTD	FIG. 2	3



VLF-EM SURVEY

Geonics EM-16 VLF-electromagnetic surveys were completed over the Grizmo and Club grids using the Seattle transmitter for cross lines and the Annapolis transmitter for the base line. Readings were taken at 25 m intervals facing 055° azimuth on cross lines and 358° azimuth on the base line.

Five conductors have been identified on the Grizmo Grid (Map 2b). They vary from moderate to very weak, trend approximately 025° and 160°, and have lengths between 50 m and 200 m.

Conductor A has the strongest response over Zone 5 and continues over Zone 8.

Postulated very weak conductors (3, C, D) were picked from inflection points on the in-phase readings. Conductor B lies proximal to Zone 8A. It may truncate to the north against a northeast trending fault controlling a quartz-feldspar porphyry dyke and possibly influencing the mineralization and trend of Zone 4. Conductor C may correspond to a northeast trending sinistral fault mapped on L.3+00N. Conductor D may be a short northwest trending structure within a small fault bounded limestone block. Alternatively, it may continue towards the fault gouge encountered in the adit or be associated with the mineralization in Zone 3.

Conductor E may be mapping the eastern contact of the mineralized sedimentary belt.

No significant conductors were found on the Club Grid.

SOIL GEOCHEMISTRY

Grizmo Grid

A total of 177 B-horizon soils or talus fines were collected at 25 m intervals on 100 m spaced slope-corrected flagged grid lines (Map 2c). All samples were analyzed for gold, silver, lead, and zinc. Sample values have been categorized in the following manner for silver:

<u>Value Category</u>	<u>Range</u>	Quantity
	Silver in ppm	-
strongly anomalous	>4.0	14
moderately anomalous	2.0-3.99	12
weakly anomalous	1.0-1.99	22
possibly anomalous	0.5-0.99	41

Silver values have been contoured defining five main targets (four strongly anomalous and one moderately anomalous).

Target A includes 1.0+00 which intersects the adit at the end of the eastern portion of the line and includes dump material. However, the eastern portion of 1.1+00N was taken adjacent to faulted limestone.

Target B is adjacent to an altered andesite, possible limestone contact. There may be contamination anywhere on the grid between L.0+00 and L.5+00N from above; however, there is good correspondence of anomalies crosscutting slope. This zone appears to continue for approximately 300 m. The anomaly may be caused by structures within the andesite or thin limestone bands. Target B1 corresponds to a fault wedge of limestone bounded by andesite.

Targets C and D are in a northerly trending, 700 m long geochemical anomaly. Target C is centered on Zone 8; Target D is below Zone 10 and includes Zone 11. Between these two targets is Zone 5 which is coincidental with a weak to moderate VLF-EM conductor.

Target E is a northwesterly trending, 100 m anomaly corresponding to chert and limestone and possibly Zone 4.

Weakly anomalous values may correspond to fracture mineralization in andesite close to chert-limestone contacts such as BRO-60 on L.9+00N,

Club Grid

A total of 154 B-horizon soil samples were collected at 25 m intervals on 100 m spaced slope-corrected flagged grid lines (Map 3c). All samples were analyzed for gold, silver, lead, and zinc. Sample values have been categorized in the following manner for silver:

Value Category	Range	<u>Quantity</u>
	Silver in pom	
weakly anomalous	>1.0	2
possibly anomalous	0.5-0.99	11

Weakly anomalous values occur adjacent to the main creek and may be a result of contamination from Zone 2S. This creek is moderately anomalous in silver.

SILT GEOCHEMISTRY

A total of 57 silt samples were taken, including 8 silt samples on the Club Grid. Results are shown on Map 4. All samples were analyzed for gold, silver, lead, and zinc. Sample values have been categorized in the following manner for silver and gold:

Value Category	Range	Quantity	Range	Quantity
	Silver (ppm)	_	Gold (ppb)	
strongly anomalous	≥5.00	2	≥100	1
moderately anomalous	1.00-4.99	1	60-99	1
weakly anomalous	0.50-0.99	1	30-59	2
possibly anomalous	0.25-0.49	8	15-29	2

A silt sample taken from a small dry creek bed, where it enters Ericksen Creek, yielded 96 ppb Au, 62.0 ppm Ag, 4400 ppm Pb, and 7300 ppm Zn. This creek drains Zone 2S, a horizontal distance of 0.9 km. Moderately anomalous values of 4 ppb Au, 1.14 ppm Ag, 148 ppm Pb, and 290 ppm Zn are found downstream above the anomaly where Ericksen Creek enters the Taku River. Similar values were obtained from the Club Grid along Ericksen Creek. Based on silt sample results, four anomalous areas have been targeted for follow-up work (Map 4a).

Target A yielded the highest gold value (428 ppb) but also included an anomalous silver value (5.80 ppm), and high Pb (680 ppm) and Zn (310 ppm) Two adjacent sites returned 28 ppb and 40 ppb gold. Target B values. includes adjacent 64 ppb and 16 ppb Au anomalies. A gossan above these creeks, Wild West Zone, has been soil and rock-chip sampled. Results from Rock-chip samples have not sampled rocks ranged from 20 to 2360 ppb gold. be taken over the best soil anomalies. Target C includes three anomalous silver anomalies (0.72, 0.34, 0.30 ppm) in rugged terrain. prominent gossans above silt sample site GT-6. However, silts in talus chutes were difficult to obtain and may not be representative. consists of anomalous silver (0.45 and 0.43 ppm) in a northeast trending structure.

ECONOMIC ANALYSIS

Gower (1979) estimated possible geological reserves based on surface sampling, drilling, and underground drilling. Surface sampling (Appendix IV) is after Ericksen-Ashby Mining Co. Ltd. from Gower (1979). Trenches have been renumbered and correspond to locations on Map 1 (Payne, 1979). Appendix V is a compilation of data by Payne and lists the different sources utilized. Table 3 is Gower's compilation but includes drilling by Island Mining and Exploration Co. Ltd. Table 4 depicts results from Ericksen-Ashby Mining Co. Ltd. drilling, while Table 5 is a summary of drilling by Island Mining and Exploration Co. Ltd.

Brent Hemingway (1982) describes the massive sulphide showings of Zone 1 as roughly lensoid or podiform and plunging roughly 20°S. On the east face of Zone 2, this plunge can be seen where exposed by gullies. Zone 2-2S appears to have dimensions of 600 m x 200 m where intersected by the feldspar porphyry dyke. By using 2000'x650'x10' dimensions, 1,300,000 short tons of geological reserves are inferred. The following values were obtained from trenches (Map 1):

Trenches	<u>Width</u>	Ag oz/ton	<u>Pb %</u>	<u>Zn %</u>	Description
2-2	5′	4.3	2.5	10.0	MS, R
2-1	4′	3.5	1.6	4.6	MS, R
	5 <i>'</i>	3.4	2.2	2.8	MS, R
2-4	on diagonal	9.9	1.9	2.0	R, 4, A
2-5	on diagonal	15.6	4.4	3.8	MS, R, SK 2
2-6	on diagonal	6.0	1.0	0.6	4, 2, SK, R
2S-1	9'	2.11	0.55	6.2	MS
2S-5	12'	4.4	1.47	1.02	R
2S-2	6 <i>'</i>	6.45	1.6	9.53	MS
2S-6	8′	3.66	0.77	0.63	2, SK
2S-3	3′	2.09	2.32	7.20	MS
2S-4	3′	5.26	1.38	11.00	MS

TABLE 3 - SURFACE SAMPLING

<u>Area</u>	Sample Length	Ag oz/ton	Pb %	<u>Zn &</u>
Glory Hole (Zone 2)	30.0 ft 46.0 ft 120.0 ft 125.0 ft	9.4	1.68 1.90 1.90 1.0	
Zone 1	35.0 ft 34.0 ft 10.0 ft 8.0 ft 8.0 ft		4.88 4.3 0.65 5.5 23.2	
EA 81-3	9.2 m	16.54	4.94	4.22
EA 81-4	5.1 m	18.30	6.42	6.20
Zone 2N	17.3 ft 8.0 ft	3.6 3.4	2.8 2.9	5.7 8.6
Zone 3	15.0 ft 19.0 ft	35.1 4.76	20.24	23.23 1.08
Zone 5	5.0 ft 11.5 ft 20.0 ft 13.5 ft	4.18 3.2 2.74 1.2	1.01 1.10 2.83 0.1	1.42 2.3 1.95 0.5
Zone 6	5.0 ft	24.2	11.8	1.6
Zone 8	22.5 ft	6.1	2.67	5.92
EA 81-8	21.0 m	low-grade		
EA 81-9	15.1 m	5.05	1.2	1.37
Zone 8A	10.0 ft 18.0 ft	19.7 12.0	2.1 4.76	1.35 2.6
Zone 10	22.0 ft	1.98	1.29	2.3
Zone 11	8.0 ft	2.62	1.49	1.6
Zone 12	64.0 ft	0.38	0.24	0.87

TABLE 4 - DIAMOND DRILLING

Ericksen-Ashby Mining Co. Ltd.

<u>DDH</u>	Length	Ag oz/ton	Pb %	<u>Zn %</u>	<u>Au</u>	<u>Cd</u>	<u>Sb</u>
S1	4.2'	17.7	4.6	2.0	-	· -	-
S2	9.0′	3.7	1.9	1.6	-	-	-
S3	12.0'	8.4	3.5	5.1	-	-	_
S4	7.0'	10.2	2.27	5.1	-	-	-
S5	13.1'	4.9	1.7	3.6	-	-	-
S6	no	significant	values				
S 7	19.5'	4.63	-	-	-	-	-
S8	· no	significant	values				
Ul	no	significant	values				
U2	no	significant	values				
U 3	0.7′	10.8	5.48	9.98	0.10	-	-
U4	0.9'	7.4	0.94	0.30	0.05	-	-
บ5	3.3′	5.3	1.93	15.40	0.02	-	-
U6	3.8′	28.1	12.63	21.21	0.02	0.36	0.54
U 7	no	significant	values				
U8	no	significant	values				

TABLE 5 - DRILL HOLE SPECIFICATIONS

Island Mining and Exploration Co. Ltd.

DDH Site/2	Zone	Elevation	Azimuth	<u>Dip</u>	Depth	<u>Conclusions</u>
	1	1,186 m	017°	-45°	48.2 m	mineralized
EA 81-2 1	1	1,186 m	017°	-75°	61.0 m	mineralized
EA 81-3 1	1	1,186 m	044°	-60°	54.9 m	mineralized
EA 81-4 1	1	1,186 m	065°	-45°	36.9 m	mineralized
EA 81-5 1	1	1,186 m	117°	-45°	89.3 m	minor mineral.
EA 81-6 1	1	1,186 m	-	-90°	70.4 m	minor mineral.
EA 81-7 2	3	942 m	095°	-45°	166.5 m	abandoned prematurely
EA 81-8 3	8	841 m	011°	-45°	114.6 m	low-grade
EA 81-9 3	8	841 m	051°	-55°	90.2 m	11
EA 81-10 3	8	841 m	051°	-75°	88.4 m	<pre>" } deeper inter-</pre>
EA 81-11 3	8	841 m	101°	-45°	67.1 m	") sectio p s poss.

Observations on the east face of Zone 2-2S show that this zone is not continuous, there are missing sections, and there is black (manganese) skarn in the limestone (as pods and fracture fillings) away from the rhyolite. Encouragingly, however, some of the zones within or adjacent to the rhyolite may be up to 40 feet wide.

Strike and vertical continuity are the dominant parameters in determining the extent of the target available for exploration by extending the adit. If the vertical dimension continues behind the feldspar porphyry, a new adit could reach this zone from the Ericksen Creek side below the Cominco drill site.

Drilling of Zone 1 in 1981 encountered high silver values: 16 and 18 oz/ton over 9 m and 5 m respectively, averages of high and low values obtained by Ericksen-Ashby in trenches. Zones 1 and 2N could be faulted. Examination of the down-plunge extension would require drill testing.

Underground development in 1964 by Ericksen-Ashby Mining Co. Ltd. was designed to test for the downward extension of the upper surface showings. The adit, over a distance of 500 feet, encountered two areas of mineralization, one in the adit itself and the other in the hanging wall near the far end. At 120 feet from the portal, the adit crossed a fault; and for 127 feet, was in mineralized breccia. Muck samples from cars and chip face samples indicate an average grade for the shoot of 10.3 oz/ton Ag, 3.43% Pb, and 7.84% Zn (Zone 9).

A diamond drill station was slashed out at the end of the adit. Drilling to the footwall below the surface outcrop of the northwest end of the upper showing (Zone 1) failed to cut sulphides, presumably due to faulting. Subsequent drilling to the southeast cut the same mineral zone as encountered in the drifting which had turned into the right wall on a small fault at 247 feet from the portal (see Figure 30). The adit was examined in 1987 and the workings were dry and stable. All mining machinery has been removed from the property; however, the underground tracks are still in place.

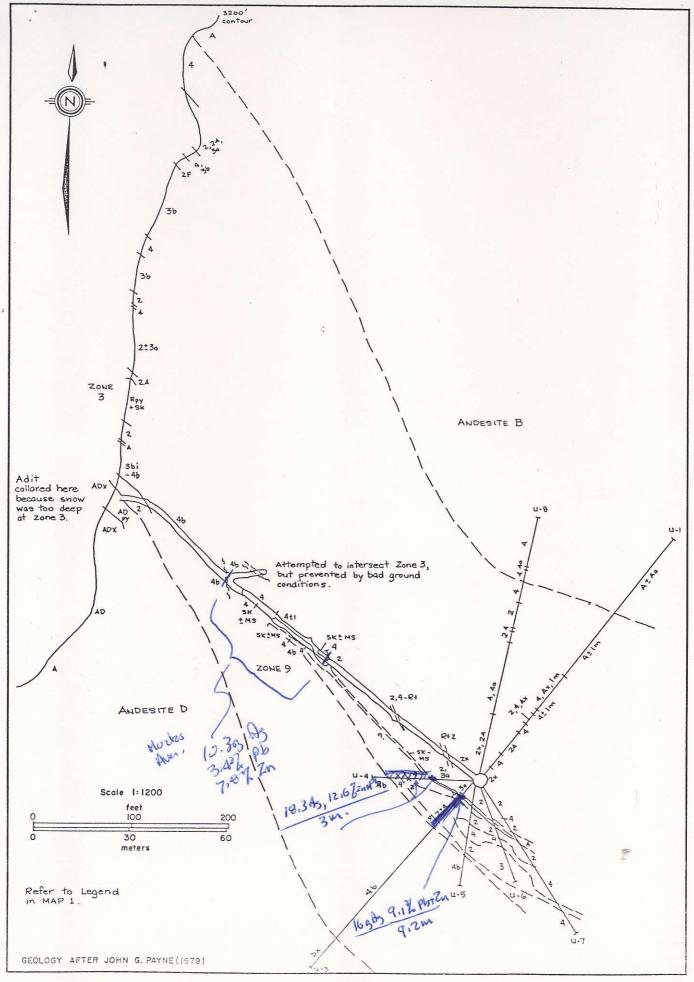


FIGURE 30 UNDERGROUND WORKINGS AND DRILL HOLE DATA, GEOLOGY

DRILLING LOGISTICS

In a worst case scenario, drilling Zone 2-2S would require water to be pumped 3400 feet (1,040 m) horizontal and 2600 feet (800 m) vertical from the pond below camp. In 1964, when Ericksen-Ashby Mining Co. Ltd. drove a 500-foot (152 m) adit, they pumped this pond dry. The pond was good for only 1965 feet (600 m) of drilling when used by Island Mining and Exploration Co. Ltd. in 1981. They supplemented their requirements by a small creek 3280 feet (1000 m) west of the adit. Zone 1 was successfully drilled and it lies 600 feet (185 m) vertically below Zone 2S. Plastic hoses, garbage bags, and drums connected to a 200-gallon metal tank from nearby small creeks suggest that some run-off was captured. Zone 1 contained six short holes and required water to be pumped through 800 m of pipe from a small creek 300 m below.

If drilling coincided with spring run-off, it is likely that sufficient water could be collected. As a precaution, however, polyethylene holding tanks should be constructed along the Bracken Fault so that run-off can be captured.

Another alternative for a reliable water source for future exploration would be to drill a multi-purpose, flat 2000-foot hole from the back of the adit on a bearing of 122°. This hole would test Zone 6 at depth and somewhere between Zones 2 and 2S at depth. If this hole were continued, it would penetrate the other side of the mountain near the Cominco hole. Once through, water could be pumped the other way from the pond or from the glacier feed creek.

Alternatively, the Cominco hole could be re-drilled. This time, though, the drill should be protected by slashing an adit entrance in the event of slides. If this approach is considered, 4 km of road construction from the Taku River (following the Cominco horse trail) would likely be required.

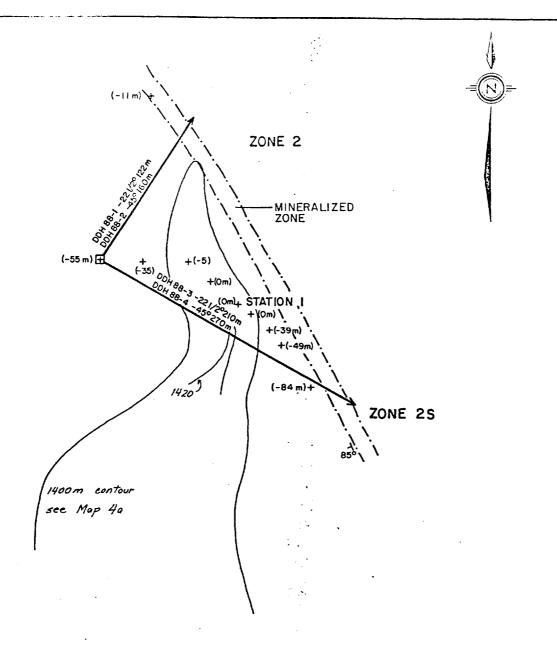
Drilling Zone 2-2S

A suitable site for drilling Zone 2-2S is shown on Figure 31. Two contour intervals are shown for general location. Contours generated from the 1:10,000 ortho and contours on Map (Payne, 1979) are not accurate for the very steep topography in this area. Slope corrections and compass bearings were shot to the drill station and anchors. Both sites should be surveyed prior to drilling, since there are locally strong magnetic disturbances.

Four diamond drill holes would test Zone 2-2S over 200 m horizontal and at depths between 98 m and 166 m below surface outcrop. Holes would be drilled both at -22.5° and -45° dip from the same site in two different directions. Hence, if the shallow hole was not encouraging, the deeper hole could be aborted.

Based on \$25/foot, the holes would cost between \$10,000 and \$24,770 for a total of \$62,500. This would not include camp support, site preparation, or pumping of water. The advantages of drilling from this site include:

- 1. less hazard for slides (60 m vertical below ridge)
- 2. natural bump to facilitate pad construction
- drillers could easily walk to site from upper camp (last 80 m should have anchored ropes for protection)
- 4. drilling could continue at night and in bad weather (assuming no rods or parts were required)
- 5. if deeper holes or shallower intersections were required, wedging could be conducted
- 6. some local run-off may be captured.



HORIZONTAL PROJECTION OF DIAMOND DRILL HOLE

+ (-i0m)

SURVEY STATION RELATIVE TO STATION I.

ELEVATION AT STATION I IS APPROXIMATELY 1410 m NORTHWIND VENTURES LTD.

ERICKSEN - ASHBY PROPERTY

ZONE 2 and 2\$
DRILL PROPOSAL MAP

DATE NOV.19	87	NTS 104	K/II
PROJECT BC 87	7-6	MAPPED/ DRAWN BY T. BC	JCZYSZYN
SCALE 1:250	<u> </u>	5b	`ЮОm

TAIGA CONSULTANTS LTD. FIG.

FIG. 3

CONCLUSIONS

Previous workers have considered the rhyolite as a flow or eruptive unit, and exploration has been focused on basin development proximal to the rhyolite.

Massive sulphide mineralization on the Grizmo Grid was considered too weak or sporadic and too distal from the rhyolite. Massive sulphide mineralization may, in fact, be skarn-related with both lithological and structural controls. In some deposits, mineralization is of a higher grade distal from the granite porphyry intrusions. Exposed mineralization on the Grizmo Grid, therefore, may be higher in the system and hence better grades could be found at depth. VLF-EM responses suggest possible massive sulphide concentrations.

High gold values to 0.40 oz/ton were reported by Cominco (1951) from Zone 2. In 1987, limited sampling from this zone again returned anomalous gold values (one sample taken from Zone 2S at the limestone contact returned 876 ppb Au).

Encouraging gold values are also found south of Zone 2S; at Inspiration (26,200 ppb rock), at Wild West (2,360 ppb soil), at Green Crop (2,320 ppb rock), and at silt sampling Target A (428 ppb).

RECOMMENDATIONS

Further exploration of the Ericksen-Ashby property should be focused on structural and/or lithological contact control, alteration, and skarn zonation. Exploration should consist of:

- 1. drilling Zone 2-2S to prove depth continuity (750 m of diamond drilling).
- 2. enhanced geophysical surveys on the Grizmo Grid (similar type deposits have been explored for in the Rancheria District in the Yukon); 10 km of line-cutting, secanting, MaxMin and magnetometer surveys.
- 3. diamond drilling on the Grizmo Grid (750 m).
- 4. follow-up of silt geochemical anomalies including research of Amy and Stuhini occurrences; and possible acquisition of more ground to the south to protect the southern geochemical target.
- 5. follow-up on gold occurrences.

In the above matter, consideration should include:

- a) water problems (large vertical pumping intervals).
- b) steep topography (which will require experienced climbers).
- c) weather problems and access.

Water holding tanks or ponds can be built on the Bracken Fault, and heavy-duty pumps brought in capable of at least 1400 feet of vertical lift. The helipads and 400-gallon tank at Zone 1 would be an ideal second pump staging area requiring 800 feet of vertical lift from the holding tanks.

Two camps should be established when drilling Zone 2-2S, since helicopter support to the top could be hampered or even precluded by cloud. Weather conditions would be more favourable in August but water problems more acute. Drilling could commence during run-off on Zone 2 and 2S while geophysical work began on the Grizmo Grid. Later the drill could be moved down to the grid. If results are favourable from Zone 2-2S, exploration should proceed underground.

'Quotes for road construction costs and feasibility up Ericksen Creek from the Taku River should be obtained from a local contractor out of Juneau. This should include cost and feasibility of barging heavy equipment out of Juneau.

If an adit connected both sides from Ericksen Creek side then both the water supply and access problems would be solved.

If significant mineralization is discovered at lower levels (i.e., Yogurt Zone, Grizmo Grid), then exploration should proceed upwards culminating in Zone 2S. Therefore, continued surface work is still recommended at this stage. Particular attention should be focused on current exploration philosophies and results, as Cominco/Redfern are drilling just west of the property near river elevation. If these results are favourable, exploration should also be considered in the vicinity of the western property boundary.

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PROPOSED EXPLORATION AND DIAMOND DRILLING BUDGET

Ericksen-Ashby Project, Tulsequah, B.C.

PRE-FIELD PREPARATION Data compilation, reproduction purchase of disposable supplication equipment assembly, work permodrill and helicopter contract	es, crew and nit application,		5,705
FIELD COSTS			
Mob and demob			
Travel expenses and meals		10,000 *	
Freight and expediting		10,000 *	20,000
Personnel			
Project Supervisor	10 days @ \$450/day	4,500	
Project Geologist	80 days @ \$375/day	30,000	
Jr.Geologist/Climber 2 x	30 days @ \$350/day	21,000	
Blaster	20 days @ \$350/day	7,000	
Sampler/Prospector	50 days @ \$250/day	12,500	
Sampler/Prospector	30 days @ \$250/day	7,500	
Labourer	80 days @ \$225/day	18,000	
Camp Cook/Labourer	80 days @ \$180/day	14,400	114,900
Diamond Drilling Program			
BQ drilling	1500 metres @ \$90/m	127,500 +	
Mob and demob		25,000 +	
Extra services, equipment 1	osses,		
cementing, reaming, etc.		15,000 +	
Fuel, mud, core boxes, misc	cellaneous	20,000 +	187,500
Support Costs (geological cre	ew, drillers, helicopter pi	lot)	
Camp and Prospecting Equip	nent Rental		
•	400 man days @ \$15/day	6,000	
Camp Food	400 man days @ \$35/day	14,000	
Mag w/ base station	15 days @ \$75/day	1,125	
VLF-EM unit	15 days @ \$18/day	270	
Generator	80 days @ \$25/day	2,000	
HF radio-telephone	80 days @ \$10/day + calls	1,400	
FM walkie-talkies 2 x	80 days @ \$ 8/day	1,280	
Chainsaw	80 days @ \$ 8/day	640	
Miscellaneous (lumber, fue		05 000 4	E1 716
climbing equipment, line	s & tanks, explosives	<u>25.000</u> *	51,715
Transportation			_
Fixed-wing aircraft		12,000 +	
Helicopter incl fuel	180 hours @ \$600/hour	<u>108,000</u> +	120,000

Geochemistry and Assays Drill core / rocks Soil/silt samples	(Au,Ag,Cu,Pb,Zn) 1500 samples @ \$14/each 600 samples @ \$11/each	21,000 * 6,600 *	27,600
POST-FIELD			
data compilation, drill	logs, final report		1
Geologist	21 days @ \$350/day	7,350	
Drafting	160 hours @ \$25/hour	4,000	•
Secretarial services and	supplies	2,110	
Reproduction of maps, lo	1,000 *	14,460	
		• • • • •	
	of third-party expenditures	8,890	
+ Handling Charges @ 3%	of sub-contractors' costs	9,230	<u> 18,120</u>
	TOTAL ESTIMATED	BUDGET	\$560,000

Descharal

T. Bojczyszyn, B.Sc., P.Geol.

CERTIFICATE

- I, Tom Bojczyszyn, of 8906 34th Avenue N.W. in the City of Calgary in the Province of Alberta, do hereby certify that:
- 1. I am a Consulting Geologist with the firm of Taiga Consultants Ltd. with offices at Suite 400, 534 - 17th Avenue S.W., Calgary, Alberta.
- 2. I am a graduate of the University of Alberta, B.Sc. in Geology (1976), and have practised my profession continuously since then.
- 3. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- 4. I am the author of the report entitled "Geochemical, Geophysical, and Geological Evaluation of ERICKSEN-ASHBY PROPERTY, Tulsequah the District, Atlin Mining Division, British Columbia", dated February 22, 1988. I directly supervised the work described herein.
- 5. I do not own or expect to receive any interest (direct, indirect, or contingent) in the properties described herein nor in the securities of NORTHWIND VENTURES LTD. in respect of services rendered in the preparation of this report.

DATED at Calgary, Alberta, this 22nd day of February, A.D. 1988

Respectfully submitted,

PERMIT TO PRACTICE TAIGA CONSULTANTS LTD.

The Association of Professional Engineers, Geologists and Geophysicists of Alberta

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SUMMARY OF PERSONNEL

Name / Address	<u>Position</u>	Dates Worked	Man Days
J. R. Allan, P.Geol. Calgary, Alberta	Project Supervisor		
Tom Bojczyszyn, P.Geol. Calgary, Alberta	Project Geologist	Aug.18-Sep.08	22
Brian Balazs, B.Sc. Calgary, Alberta	Climber/ Geologist	Aug.18-Sep.08	21
Michael Carlson, B.Sc. Calgary, Alberta	Climber/ Geologist	Aug.18-Sep.08	21
David Dancer Calgary, Alberta	Climber /Sampler	Aug.18-Sep.01	15
Brian Fyke Calgary, Alberta	Sampler	Aug.18-Sep.08	21
Mac Hislop Cranbrook, B.C.	Geophysical Operator	Aug.18-Sep.08	21
2001, 2.01	Sporacor	TOTAL MAN DAY	S 121