## PRELIMINARY REPORT

JUNIOR 1 - 32 CLAIM GROUP GRANT No. YA85471 - YA85502 N.T.S. 115A/3 DALTON POST AREA YUKON TERRITORY

Randall S. Rogers M.Sc., P.Geol. Rogers Exploration Services Ltd. Whitehorse, Yukon Territory

01 May 85

The Junior 1-32 claim group is located in the Dalton Post area of the Yukon Territory, 83 airmiles southwest of Whitehorse.

The property comprises 32 claims located under the Yukon Quartz Mining Act (Grant No. YA85471 - YA85502) on the eastern side of Silver Creek, 15 miles west of the Haines Highway. A government maintained gravel road extends eight miles from the Haines Highway to Dalton Post, and a recently upgraded fourwheel drive road extends a further seven miles to Silver Creek, immediately below the Junior claims.

The property is underlain by Island arc volcanics and volcaniclastics of the Pennsylvanian to Permian Station Formation which occur broad northwesterly in a trending band bound on the west by the Duke River Fault System and on the east by the Shakwak-Denali-Dalton Fault System. The Pennsylvanian-Permian package is domed upwards into a broad regional anticline by a core of Cretaceous the Junior claim group lies on the western granodiorite; limb of this anticline and includes the contact of the intrusive with the Station Creek Formation. The contact is faulted, and probably predates the dextral displacements of Shakwak-Denali-Dalton Faults, Duke and expressive of the same stress regime. A Tertiary white to creamy white felsite and biotite and/or quartz-hornblende latite porphyry appears in sills and dike swarms centralized the intrusive-volcanic contact and appears to preferentially emplaced on this zone of structural weakness.

There are at present no economic bodies of ore on the Junior claim group. Limited prospecting has discovered zones of quartz stockworking and fault breccia zones with significant pyrite-chalcopyrite-tetrahedrite mineralization near the intrusive contact; assays are pending on samples of these showings. A grid has been established on the property to facilitate exploration, and 506 soil samples collected and analysed for Au, As, Cu, Ag, In and Pb. promising anomalies in the soil geochemical number Οť program, including Au values up to 2900 ppb, warrant further investigation. A program of detailed geochemical sampling, VLF-EM geophysical surveys and trenching should be conducted on this property in the 1985 field season together with a detailed geological investigation at 1:5,000 scale. If the results of this investigation warrant, a decision to drill selected targets could be made prior to the end of the 1985 field season.

The proximity of the property to development infrastructure and the favorable results from preliminary investigations make this a particularly attractive exploration target. A joint venture between Northern Horizon Resource Corporation and Everest Resources Limited on the nearby Wil-Tuf property has proven up sufficient reserves of Ag-Pb mineralization in an identical geological environment to warrant high-grade mining. It is likely that the mineralization discovered on these adjoining properties extends to the Junior claim group.

Rogers Exploration Services Ltd. would be prepared to author a geological report complete with recommendations for a suitable program of exploration and development acceptible to the Superintendent of Brokers and to carry out such a program of exploration on the Junior claim group in the 1985 field season.

## PROPERTY

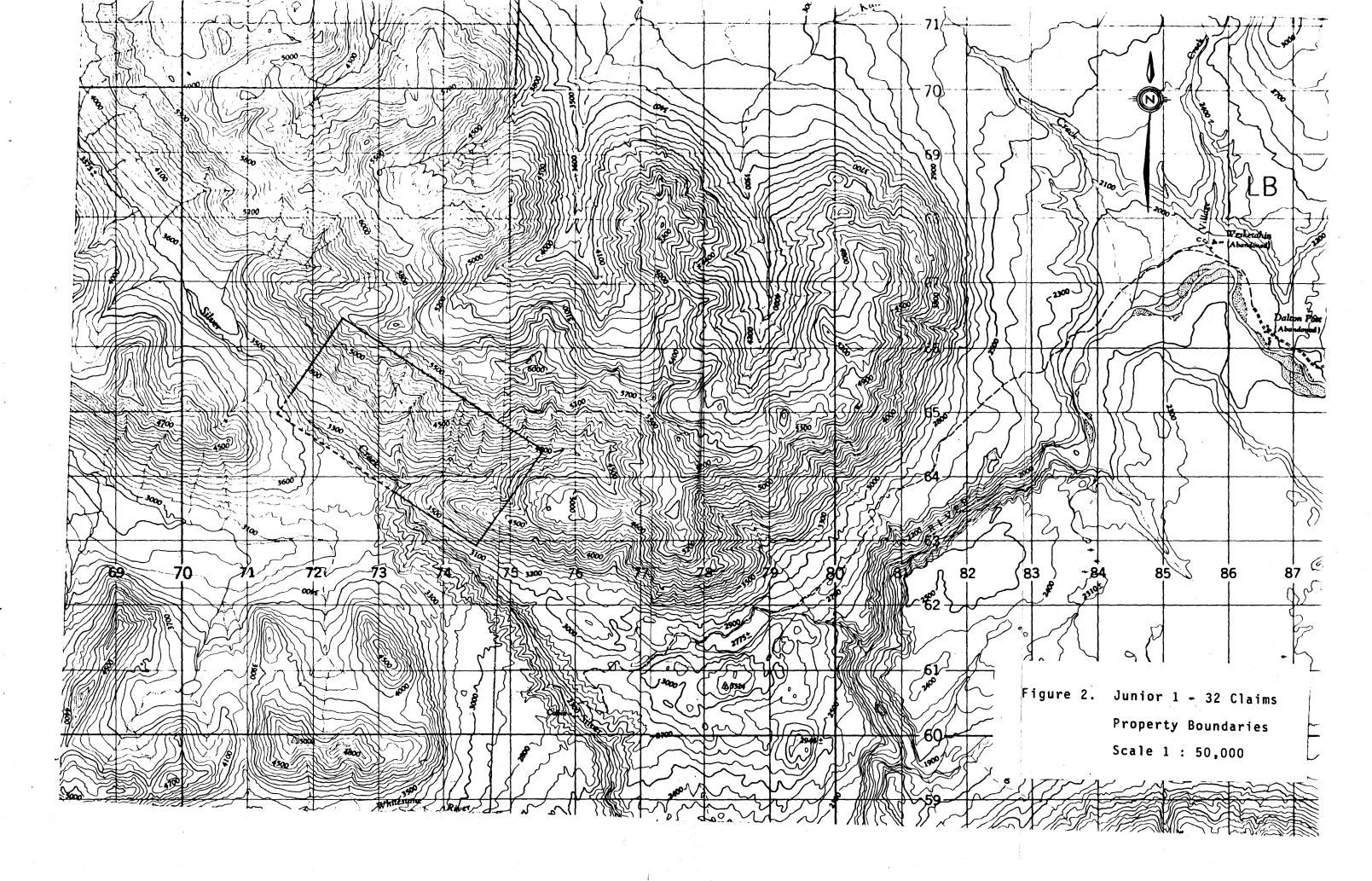
Location and Access.

The Junior 1 - 32 claims are located on the eastern side of Silver Creek, 5 miles west of Dalton Post at latitude 60 06'N by longitude 137 15'W on N.T.S. mapsheet 115 A/3. The property is situated in the Whitehorse Mining District of the Yukon Territory, 83 airmiles southwest of Whitehorse. The general location of the property is seen in Figure 1: Figure 2 shows the topographical setting of the claim group. Access is facilitated by a recently improved four wheel drive road extending to Silver Creek immediately below the property from the government maintained Dalton Post Road, which in turn connects to the all weather Haines Hichway. The Haines Highway is being upgraded through a joint Canada - United States project and is expected to soon become a major shipping route for goods in and out the Yukon through the deepwater port of Haines, Alaska. Helicopter charter, supplies and accomodation are available at the town of Haines Junction, 50 miles north of the property.

Claims.

The property comprises 32 contiguous claims located under the Yukon Quartz Mining Act held in Grant No. YA85471 - YA85502 by Randall S. Rogers of Whitehorse. Current assessment credits expire on the 28th of September, 1985.

A survey should be conducted in the course of future investigations on the property to locate the actual claim boundaries and to identify any internal fractions that may exist.



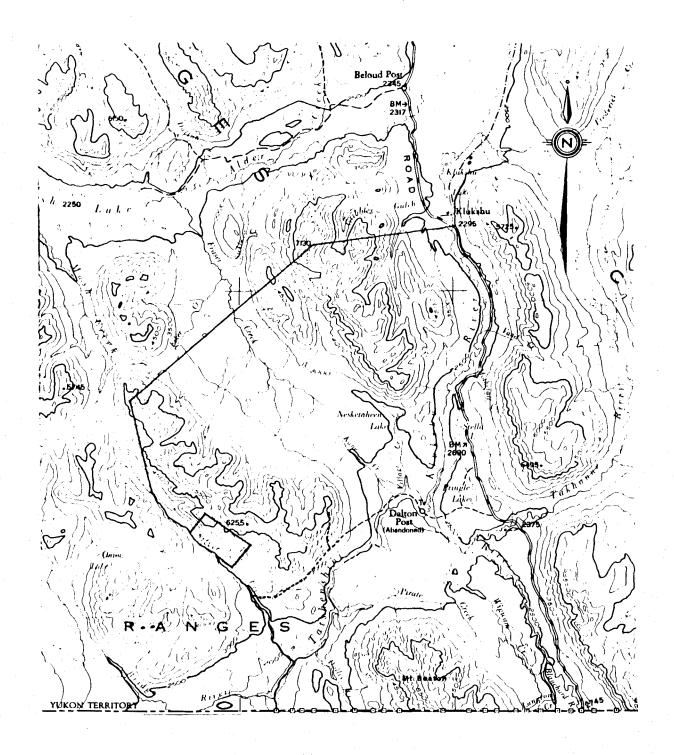


FIGURE 1. Location map of the Junior 1 - 32 Claim Group, Yukon Territory. Scale 1: 250,000.

Physiography and Climate.

The property is located in the Western System of the Canadian Cordillera as described by Bostock, (1948) and lies wholly within the St. Elias Mountains near the juncture of the Kluane Ranges and the Duke Depression of the Outer Mountain Area. The Kluane Ranges extend north and west of the property and form steep and uniform slopes with straight talus screes; in general the ranges comprise a series of major ridges connected by high saddles, locally dissected by major transverse V-shaped valleys containing the Slims, Donjek, Duke, Koidern and White Rivers. West of the Kluane Ranges the isolated plateau like belt of the Duke Depression rises to 5000 foot elevation and includes the Burwash Uplands, Wolverine Plateau and Genero River Plateau, all variously dissected by the Alsek, Bates and Tatshenshini The property is located between 3000 and 5200 feet elevation on the west flank of a mountain rising above the north bank of the Tatshenshini River in an area marked by a the oradual change from the Kluane Ranges to Depression. A portion of the aerial photograph covering the Junior property (A23792-143) is seen in Figure 3.

The forest cover of the property is light, with treeline at the 3500 foot elevation. Black spruce, white spruce, balsam poplar and white poplar dominate the forested slopes; alder, willow and small alpine plants are found above the timberline. Game is plentiful as the property lies wholly within the Kluane Game Sanctuary.

The property is shielded from the Pacific Ocean by the high St. Elias Mountains, and thus has a dry continental climate despite the proximity of tidewater. Summers are short and hot with temperatures up to 35 degrees Celsius; winters are severe with short daylight hours and temperatures as low as minus 60 degrees Celsius. As a general rule, the valley of the Tatshenshini River thaws well before the central parts of the Yukon Territory, and under normal circumstances the exploration season for surface work extends from mid-April to late October.

Timber and water for development purposes are abundant on the property.



FIGURE 3. Portion of aerial photogaph A23792-143 covering the Junior 1 - 32 claim group. Approximate scale of the photo is 1 : 24,000

In 1892 Jack Dalton and E. Glave travelled overland with four packhorses from the Chilkat River near Haines, Alaska to Kluane Lake over a footpath that had been used for over two centuries as a trading route by the coastal Chilkat Dalton established trading posts at Pleasant Camp and at Dalton Post on the Tatshenshini River. Over the next few years Dalton cleared and improved the trail as far north as the Nordenskold River at Carmacks, and the route became known as the Dalton Trail. Klondike prospectors used the trail extensively at the turn of the century enroute to the gold fields of Dawson, but prospecting in the District wasn't firmly established until 1903 at which time Silver City was settled at the eastern end of Kluane Lake and became the center of mining activity in southwestern During this period, most of the Kluane District was prospected on foot from the Tatshenshini River to Beaver unfortunately, most of the staking records for this period have been destroyed.

The threat of a Japanese invasion of Alaska prompted the completion of the Alaska Highway in 1942, and the Haines Highway was completed in 1944. The improved roads brought on an exploration boom in the post-war period and many important prospects were rediscovered.

The area surrounding the Junior claims was prospected intermittently from 1950 to 1978. On January 11, 1979 Bill Kuhn staked the Tuf 1 - 8 (YA23929) claims 3 miles east of Junior property for Northern Horizon Corporation, and a further 40 claims were tied on in April of that year to protect a high grade silver-lead occurrence. A small trenching program was conducted by Northern Horizon in July of that year. Noranda Exploration Company Ltd. staked the Kid 1 - 32 claims (YA74751) in July of 1982 to protect Au - Ag silt anomalies on Silver Creek and explored Archer Cathro and Associates staked the briefly in 1983. Cypriot 1 - 16 claims north of the present property in 1983 to protect a Cu - Co showing.

The author was retained to review the history of the Tuf property for a joint venture of Northern Horizon Resource Corporation and Everest Resources Limited in February of 1984. A summary report was prepared, and a program of surface exploration conducted on that property from May to June of 1984. A significant occurrence of high grade silver-lead mineralization was discovered and Archer, Cathro and Associates were granted a lease to commence mining the property in an agreement dated 04 September 1984.

The Noranda Kid claims lapsed in September of 1984 and were staked by Randall S. Rogers as the Junior 1 - 32 claims. A limited program of surface exploration was conducted in the fall of 1984.

The regional geological setting of the Dezadeash (115A) map sheet was originally documented by Kindle (1953). The Geological Survey of Canada launched a major geological program in the southwestern Yukon from 1973 to 1979, investigating the entire area south and west of the Alaska Highway and Haines Road.

The St. Elias Mountains are dominated by a sub parallel system of major regional faults, most of which display dextral strike — slip displacement ranging up to 200 kilometers in extent. These faults separate the region into discrete geological blocks; within each block the geology is uniform and more or less continuous, between adjacent blocks correlation of lithology is difficult or impossible.

The St. Elias Mountains are bordered on the west by the Shakwak-Denali-Dalton Fault System. West of the fault, the mountains are divided into three distinct terranes: the easternmost Taku-Skolai Terrane (Wrangellia) of mainly permo-Pennsylvanian strata; the central Alexander Terrane of Cambrian to Carboniferous units and the southwestern Chugach Terrane of Cretaceous to Jurassic age. The Taku-Skolai Terrane includes the Junior claim group area, and is bound to the east by the Shakwak-Denali-Dalton Fault and to the west by the Duke River Fault.

Intrusive rocks common to all three fault blocks include sills, dikes and stocks of pre-Permian to Miocene age. In the area of the Junior claims, these are restricted to Cretaceous granodiorite and Oligocene felsite and porphyry.

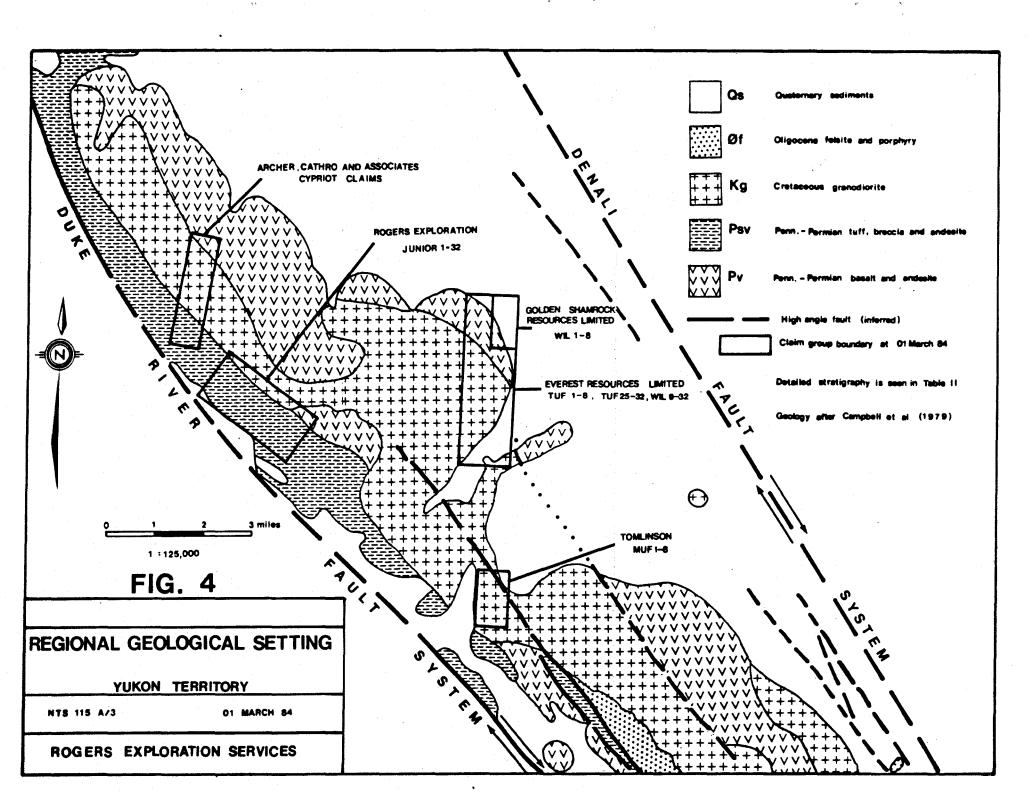
The regional geological setting of the property is seen in Figure 4. Island are volcanies and volcaniclastics of the Pennsylvanian to Permian Station Creek Formation (Pv and Psv) occur in a broad northwesterly trending band betweeen the Shakwak-Denali-Dalton Fault and the Duke River Fault. volcanic unit Pv, including dark green massive porphyritic augite basalt to andesite flows and breccias and the volcaniclastic unit Psv, including tuff, breccia and argillite define a broad regional anticlinorium trending northwest with indeterminate plunge and cored by Cretaceous granodiorite (Kg). The contact between the intrusive and the volcanic rocks is faulted and probably predates the dextral displacements of the Shakwak-Denali-Dalton Fault, although expressive of a similar stress regime. Oligocene white to creamy white felsite and biotite and/or quartz hornblende latite porphyry unit (Of) locally occurs in sills and dikes showing varying degrees of bleaching, silicification, brecciation and pyritization and appears to preferentially emplaced along zones of structural weakness.

In terms of exploration priorities, the contact between the Cretaceous granodiorite and the Permian volcanic and volcaniclastic package seem to be the locus for both known mineralization and the Tertiary subvolcanic dikes. It is likely that a genetic relationship exists between the mineralization discovered to date in the area and the Tertiary dikes.

## EXPLORATION TO DATE

The Junior property has been explored in a preliminary manner with the construction of 33 kilometers of grid and the collection of 506 soil samples at 50 meter intervals on lines 100 meters apart, orthogonal to the inferred strike of the contact. The soil samples were analysed for Au, As, Cu, Ag, Zn and Pb; the results of the analyses are presented in Figures 5, 6 and 7. A general enhancement of As, Cu and Zn values is seen along the general area of the contact; a zone of anomalous Au, As, Cu and Zn appears in the extreme northern portion of the grid with Au values up to 2900 ppb.

Limited prosepecting along the contact has detected two zones of quartz stockworking and silicic brecciation; these display significant amounts of pyrite, chalcopyrite and tetrahedrite mineralization. Assays are pending on selected samples from these zones. A more complete program of prospecting along the contact is required in the early stages of any future work on the property.



The recommendations presented herein are of a preliminary nature based on the limited geological and geochemical information available to date on the Junior claim group.

Aerial photography and LANDSAT imagery should be obtained for the area encompassing the Junior claim group and analysed for continuity of geological structure from the nearby Tuf and Wil claim groups and the location of the intrusive-volcanic contact on the property grid.

The property should be mapped at an initial scale of 1:5000 with particular emphasis placed on the intrusive - volcanic contact and the location of the acidic Tertiary dikes. Detailed prospecting along the contact and dike swarms should then be conducted with particular attention paid to zones of intense bleaching and silicification that may indicate a mineral provenance.

The property grid will need to be restored with minimal line cutting and surveying; a series of mini grids should be established along anomalous geochemical features and areas of favorable geology. These should be sampled with soil geochemistry with a density of one sample per 20 meters of line orthogonal to strike, and a series of bulk soils should be obtained over the area of the 2900 ppb Au anomaly.

Areas of overburden in which the contact becomes indiscernible should have preliminary lines of VLF-EM geophysical surveys conducted over them.

A program of bulldozer trenching may be indicated in the results of this secondary exploration. Assays for Au, Ag, Pb and Zn would be required of any mineralization encountered, and preliminary petrographic work carried out.

A program of diamond drilling may be indicated by the preceding exploration. The relative ease of access and proximity of year round water would help reduce the total cost of drilling, and the lengthy surface exploration season could make drilling of the Junior claim group feasible within the 1985 field program.

The Junior group of claims is an attractive exploration target in an area that has only recently attracted concentrated exploration effort. The property is available for acquisition on reasonable terms and a complete program including technical reports acceptible to the Superintendant of Brokers may be provided by the vendor.

For further information please contact Mr. Randall Rogers in Whitehorse, Yukon at (403) 633-2080.

