PRELIMINARY REPORT OF KRESTOF GROUP OF CLAIMS KRESTOF ISLAND, SITKA PRECINCT, ALASKA April 26, 1938

Location and Accessibility

The krestof group of claims is located on the northwest side of Krestof Island. This island is included in a group of small islands situated between Kruzof and Baranof Islands, and is located 10 miles north of Sitka. This group of several claims extends from the beach inland, and is readily accessible to ocean-going vessels.

<u>Owners</u>

The owners of this group of claims are the original locators, Cedric Davis, Leo Young and John Thunes of Kimshan Cove, Alaska.

<u>History</u>

The discovery on this group was made by the above owners in June, 1937 from gold-bearing float found along the beach. This led to a search for veins and several cross-stringers were found of the same material across two small points of land on each side of the float discovery. Several of these small cross veins were stripped and one small vein was located inland. The property was optioned to the Hirst-Chichagof Mining Company. The company restaked the claims and added several more to the group. During the season of 1938 a small diamond drill was put into operation, and a few holes were drilled. The result of this drilling apparently was not encouraging and the property was dropped. Since this drilling, further work has not been done.

<u>Geology</u>

The geology of this claim group and mainly the entire island consists of interbanded Mesozoic graywacke and slate. The slate bands have the greatest width, as compared with the harder graywacke bands. Sections of the slates are highly schistose and slightly mineralized as the result of regional folding. The general strike of the formation is N 45° W and the dip varies from 60 to 70° E. Several greenstone boulders, possibly aplite, were noted along the beach, showing the presence of such as dikes or sills; however, none was seen in place. East of the beach showings several small black limestone inclusions were noticed interstratified in the slates. The small veins, as they occur on the beach, are definitely crossstringer veins, most pronounced in the graywacke bands. Whether or not they are related to

any definite structure is not known. They cross the wide shear zones in the slates without displacement, showing they are of later origin. The small inland vein has a more northerly strike and conforms more to the strike of ore veins in these formations, however, this vein is on a minor structure.

Showings and Development

The total showings were found in three localities, two of which are on Discovery Claim (Krestof No. 1) on two rock points outcropping on the beach 350 feet apart (note sketch), and one showing consisting of five trenches on a small quartz vein on Krestof claims Nos. 4 and 5. The latter is located 1,500 feet south of the other two.

The discovery showing, located on Discovery Point, consists of two parallel quartz veins, with a third vein intersecting No. 2 vein at a point 12 feet west of the Discovery Post. No. 1 vein is located 60 feet north of Discovery Post and cuts across the barren point. It is exposed for 80 feet, and continues into the water on both ends (note sketch). The highest point on this vein is 6 feet above high tide level. This vein strikes N 60° E and dips 60° SE. It consists of banded quartz with free walls. Its width varies from 4 to 6 inches, and it is well mineralized with arsenopyrite and free gold. No. 2 vein, located at Discovery Post, 60 feet south of No. 1, is well exposed in a trench for 50 feet. The strike is N 55° E and the dip is 70° NW. While these veins strike nearly parallel, they apparently intersect each other on their dips. The formation is graywacke with some schist developed on the walls. The quartz varies from 6 to 8 inches in width. The amount of mineralization appears to be less than in No. 1 vein. Free gold shows in several places. No. 3 vein, which intersects No. 2 vein at a point 12 feet west of Discovery Post on the footwall, is exposed a distance of 35 feet. Its strike is N 83° E and the dip appears to be nearly vertical.

Between Discovery Point and the next protruding point northeast a distance of 350 feet the formation is schisted soft slate. Numerous quartz boulders occur on the beach over this distance. These are the result of erosion by wave action on the slates and the apparent cross veins. This second point is another band of graywacke. Here seven small quartz stringers and irregular small bunches of quartz are irregularly distributed over a distance of 60 feet. This band of graywacke is 40 feet wide and the veins cut across on a parallel

strike to those on Discovery Point. The veins vary in width from 4 to 6 inches, while some of the quartz bunches have greater widths. The graywacke between the veins is fractured and slightly schisted, and contains a sparse mineralization. The quartz is only slightly mineralized and rather barren.

No. 3 showing is located 1,500 feet directly south of No. 2 showing and 300 feet inland from the beach at an elevation of 125 feet. The showing consists of a small banded quartz vein exposed in five trenches over a distance of 300 feet. This vein cuts the schistosity at a low angle, and the strike, which is slightly west of north, conforms nearer to the strike of the ore producing veins in this formation on Chichagof Island. Trench No. 1 has a length of 60 feet, cuts across the formation on the hillside, and is the southernmost trench. This trench was caved, and whether the vein was encountered is not known, as no quartz shows on the dump. Trench No. 2 is located 70 feet north of No. 1. Here a vein is exposed in graywacke containing 5 inches of banded quartz. This vein has hard free walls and contains a little arsenopyrite. The length of this trench is 20 feet. Trench No. 3 is located 40 feet north of No. 2 and has a length of 12 feet. Here the same vein has a 7-inch width of quartz. No gouge shows on the walls, however, the quartz is free from them. Trench No. 4 is located 80 feet north and across a small gulch from No. 3 trench. This trench was filled with muck, however, quartz pieces up to 4 inches in width show on the dump.

Mineralization

All the veins noted contain the same type of mineralization and the same character of a white milky quartz. The metallic minerals consist of arsenopyrite, crystals ranging in size from fine up to 1/4 inch in diameter, pyrite as fine cubes in both the quartz and schist, and free gold, the latter showing mostly on the walls of the quartz. Quartz crystals and vugs are common in the veins. Associated with the quartz as gangue minerals are calcite or dolomite, sericite and altered pices of wall rock. The veins are slightly banded, showing minor periods of re-opening.

Assay Sheet

Sample No.	Location	Description	Width	Gold Gold	Silver
					
353	No.l vein near east side	Across quartz, banded	6"	0.03	nil
354	No.2 vein, in-	Across banded	8"	Trace	nil
	tersection spur vein	quartz			
355	Inland vein, No. 3 trench, eleva- tion 125'	Across banded quartz	7"	Νil	Υiγ