

PRELIMINARY REPORT OF YANKEE GROUP OF CLAIMS, KY 112-47
 BERNERS BAY REGION, ALASKA
 October 31, 1938.

Location and Accessibility:

The Yankee group of claims is located between Johnson Creek and Berners River, extending from nearly sea level northwest toward Lions Head Mountain in the Berners Bay area. The property can be easily reached from salt water by following the Jualin tramway from its terminus on Berners Bay to Johnson Creek and thence 2,000 feet via trail to the Yankee tunnel, the lowest showing, elevation 572 feet. A total of eight claims; namely, Yankee Nos. 1, 2 and 3; and Rice Nos. 1 to 5, inclusive, comprise the group.

Owners:

Niles Schroeder of Juneau, Alaska holds this entire group.

History:

The quartz vein on this property was discovered by the McCloskey Brothers of Juneau about 1911. They staked the property and drove the present tunnel. Some stripping and open-cut work was done. The property became known as the Three Jacks. It was finally abandoned, and was staked in 1934 by Niles Schroeder. Since the earlier workings very little work has been done. This year additional ground held as mill sites has been staked along Berners River.

Geology:

The formations noted on this group of claims consisted mainly of Jualin diorite with included greenstone schists. The vein and showings are in the massive diorite. The general geology of this area may be obtained in U. S. G. S. bulletin No. 446, "Geology of Berners Bay Region, Alaska," by Adolph Knopf. Detail geology of surrounding properties can be obtained in U. S. G. S. bulletin No. 287, "The Juneau Gold Belt," by A. C. Spencer, pp. 134-137.

Showings and Development:

A banded quartz vein is traceable from the Yankee tunnel, elevation 572 feet, on Yankee claim No. 2, for 3,000 feet to the northwest to an elevation of 1080 feet. It has a strike of N. 41° W., and dips slightly off vertical to the south. The width varies from a few inches to five feet and averages two feet. The walls are schisted and distinct, and together with its traceable length, indicate a strong vein. Three definite bands of quartz were noted at each showing. The center band is of a darker nature and contains bluish streaks giving it a dark grayish blue color. The two outer bands are nearly barren of sulphides and vary in color from milky white to glassy. The values are confined mainly to the

center bluish band, which varies in width from a few inches to 18 inches and averages less than 12 inches. Both walls are somewhat impregnated with sulphides, mainly pyrite and some arsenopyrite and possibly carry low values. The alteration of the wall rocks appears to have been the result of movement, rather than from mineral solutions, as many various phases of the diorite were noted.

The Yankee tunnel follows the vein into the mountain over its entire length of $136\frac{1}{2}$ feet. The vein varies in width from 18 inches to 5 feet. Thirteen channel samples were taken across the vein (note sketch), and results may be noted on assay sheet.

Cut No. 1, located above the Yankee tunnel, elevation 620 feet, exposes a 6-foot width of the vein, of which 4 feet is quartz. Considerable debris prevented sampling this cut.

Cut No. 2, elevation 860 feet and 150 feet northwest of cut No. 1, exposes only two feet with 12 inches of quartz. The hanging wall in this cut is highly schistose.

Cut No. 3, 150 feet north of cut No. 2, elevation 930 feet, discloses nearly a two-foot vein with a 7-inch bluish center band and 14 inches of altered diorite and gouge on the footwall. Considerable mineralization occurs in the quartz and in the altered diorite.

Cut No. 4, located 1,500 feet northwest of cut No. 3 at an elevation of 1,080 feet, shows the last exposure of the vein seen. At this point the vein cuts across a small ravine near the head of a small creek. On the east bank the vein is exposed in an old cut for a distance of 40 feet. The vein strikes N. 45° W. and dips 86° S. The walls are schisted and altered and the quartz contained a strong mineralization of pyrite.

Mineralization:

Pyrite and a little arsenopyrite were the only sulphides noted in this vein. The gangue minerals were two generations of quartz, milky white to glassy, and the grayish blue ore quartz. Chlorite and other alterations of diorite mineral were noted in both types.

Timber and Water Power:

Hemlock and spruce is abundant on the property and surrounding vicinity. Johnson Creek affords a small water power, however, the Jualin mine has utilized this power in the past and owns the ground along most of the creek bed.

Sampling and Assays:

It will be noted on the accompanying assay sheet that values were confined mainly to the center bluish quartz band. Sampling in the tunnel was, however, across the entire width of the vein. Had the samples been limited to the center band a much higher return would have been obtained. However, the width would have been less than 12 inches. This item in respect to mining for a small mill capacity is important. Another factor for consideration is the apparent small percentage of free gold, as apparently most of it is combined with the sulphides and milling would be limited to concentration.

SAMPLE AND ASSAY REPORT, YANKEE GROUP, BERNERS BAY
 Wm. Schroeder
 December 6, 1938.

<u>Sample No.</u>	<u>Location</u>	<u>Description</u>	<u>Width</u>	<u>Gold oz.</u>	<u>Silver oz.</u>	<u>Total Value</u>
540	No.2 Surface cut, Yankee vein, El. 860!	Bluish qtz. band only	9"	1.60	1.00	\$ 57.65
541	No.3 surface cut, El. 930', NW.end of cut, Yankee vein.	Across face of cut, qtz. vein	2'5"	0.10	0.40	3.76
542	Cut 4 Yankee No. 3 Claim, El.1080', cut - E. bank of creek.	Pieces from mineralized center band of vein.	Pieces	0.20	0.10	7.06
549	Yankee tunnel, El. 572', face 136½' from portal, top	Banded vein	4'6"	0.08	0.10	2.86
550	Same as 549, 10' back from face	" "	5'	0.06	0.40	2.36
551	Same as 550, 20' back from face	Banded qtz. vein	3'	0.05	0.20	1.88
552	Same as 551, 30' back from face	" "	30"	0.02	Nil	.70
555	Same as 552, 40' back from face	" "	28"	0.18	0.20	6.43
554	Same as 555, 50' back from face	" "	30"	0.09	0.40	3.41
553	Same as 554, 60' back from face	" "	30"	0.26	0.10	9.10
548	Same as 553, 80' back from face	" "	30"	0.08	0.40	3.06
546	Same as 548, 100' back from face	" "	20"	Nil	Nil	
543	Same as 548, 110' back from face	" "	32"	Nil	Nil	

<u>Sample No.</u>	<u>Location</u>	<u>Description</u>	<u>Width</u>	<u>Gold oz.</u>	<u>Silver oz.</u>	<u>Total Value</u>
544	Same as 543, 120' back from face	Banded qtz. vein	26"	0.04	0.20	\$ 1.53
545	Same as 544, 130' back from face	" "	18"	0.34	0.10	11.96
547	Portal of tunnel	" "	31½"	0.12	0.60	4.59