(6.1,13.9)
56°47'N
133°25'W
TERRITORY OF ALASKA

PE-117-4
Petersburg 117

DEPARTMENT OF MINES
JUNEAU, ALASKA

134-132

117-1
Petersburg Prec.

PRELIMINARY REPORT on TAYLOR CREEK LEAD-ZINC PROPERTY of ORA P. SCHOONOVER
by
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- June 1946 -

The ore zone on Taylor Creek is exposed along the banks of Taylor Creek from a point approximately 1500 feet above the first falls to within 300 feet of the second falls, a distance of nearly 1700 feet. Elevation of the creek ranges from 165 feet to 175 feet between the falls. This zone can be traced by outcroppings and exposures along the steep banks, which range from 30 to 50 feet in height. The ore zone is irregularly distributed in a stratum of limestone underlain by andesitic greenstone schists and overlain by graphitic lime shale. The limestone has a thickness ranging from 50 to 60 feet and lies conformably upon the greenstone schists. The dark limy shales are laid conformably upon the limestone stratum.

The formations have a general northwest strike, N. 28 to 30° W., with a very low and variable dip to the northeast. Northwest faults intersect northeast faults that have formed large dimensional blocks, which show step faulting and low tilt to the northeast. Some of the northeast faults contain basic dike magma which appears to have some genetic relation to the high grade zones of ore where they cut the limestone stratum. Some folding has been subsequent to the northeast faulting, while general folding of the strata was mostly prior thereto. Small open folds with NE. plunging apexes at low angles were noted and were formed prior to the faulted blocks.

The ore zone consists of a dissemination of lead, zinc and iron sulphides contained both in the central and basal portions of the limestone stratum. Small high-grade pockets occur along fault intersections, and the dike-filled, northeast trending faults. Outcrops show in numerous places along the creek banks as deep brownish-red zones caused by the oxidation of the heavy pyrite mineralization. Small amounts of secondary lead and zinc minerals were noted in the thin fractures of the limestone on the ore zone outcrops, and some black manganese oxides are also contained in the ore.

Discovery of another zone of extensive outcroppings, that appears to be the same ore and same limestone stratum, was made early this year along the top and sides of a northwest-trending ridge which lies from 600 to 800 feet to the northeast of the creek outcroppings. (Note sketch map) The outcroppings, over which ore appears to be indicated, are exposed 600 feet in length and range from 40 to 100 feet in width. This ridge appears to be an upturned edge of one of the faulted blocks which has again exposed the ore zone. To the south the ridge noses into the muskeg flats and rises to an elevation of over 300 feet to the northwest. Heavy timber and vegetal growth make some development work necessary before much can be said regarding these indicated ore outcroppings.

Sample JCR. 1204 was taken across 12 feet of the oxidized material on the crest of the ridge, where it is best exposed. This location is on the side claim lines of Nos. 4 and 5, 425 feet north of the south corner posts and discovery posts. Following are results of assay:

Oz. Per Ton		Percentages		
Au.	Ag.	Pb.	Zn.	Cu.
0.61	1.20	1.7	1.6	0.02

Three channel samples were taken across the creek bank outcroppings and from the bottom of the creek as indicated. Development, such as rock cuts into the weathered outcroppings, is needed before true values can be obtained from samples. These are, however, indicative:

Sample No.	Locality	Width	Oz. Per Ton		Percentages		
			Au.	Ag.	Pb.	Zn.	Cu.
1202	Claim No. 1, N. bank, 20' above creek, 350' above Disc. cut.	8'	0.08	1.0	Nil	0.4	0.02
1203	Claim No. 1, bottom of creek, 300' above Disc. cut.	12'	0.29	3.70	0.08	23.2	0.07
1201	Claim No. 2, center claim line, N. bank of creek, 100' above center end post.	10'	Tr.	0.8	1.5	18.8	0.02

The outcrop showings in this area appear to be quite extensive, and if they represent a continuous zone throughout a length of over 1500 feet, and 1000 feet in width, as indicated, containing a commercial grade of ore, there may be sufficient tonnage for operation. This block could easily be strip-mined at low cost. The problem at hand is surface development by either surface trenching or small diamond drill. More investigation is needed before a definite program can be outlined.