

PE 82-2

PRELIMINARY REPORT OF BAROMETER GROUP,
KUSKOKWIM PRECINCT, ALASKA
August 7, 1939

PE 82-9

Location and Accessibility:

The Barometer group of eight lode claims is located on the south side of the Kuskokwim River, one and a half miles via trail from the river bank at a point one mile above Parks and seven miles below Sleetmute. The claim group parallels the river in an east-west direction. The elevation of the river is 250 feet and the tunnel elevation is 380 feet.

History and Ownership:

Cinnabar was found on this group by Hans Halverson in 1921. The tunnel was driven the following year a distance of 122 feet, its present length. Indications of cinnabar were encountered in the tunnel at a point 50 feet from the portal. In 1923 Halverson sold the property to E. W. Parks for the sum of \$1,000. Additional surface work was done consisting of surface trenching and stripping. Minor attempts at retorting were carried on and a small production was made. In 1931 Dr. Carter optioned the property and drove the 40-foot crosscut. (Note sketch) The following year this option was dropped. Last year A. G. Skidmore obtained a lease from the Parks Estate, now owner of this and the Parks property, and retorted ten flasks of quicksilver during the season. This season the property was inactive.

Geology and Showings:

The location of this claim group is five miles north of Barometer Mountain, a laccolith intrusive with which the quicksilver deposits are believed to be genetically related.* This mountain is reported to be a monzonite.** This intrusive has invaded Mesozoic sandstones and shales, which are termed probably of upper Cretaceous.*** These sediments consist of various phases of sandstones varying from thinly bedded to bands up to 100 feet wide, ranging from fine grained to coarse concretionary types and various colored shales, and ranging in color from green to brown or black. They have been subject to intense folding and are in

*U. S. G. S. Bull. 622, "Quicksilver Deposits of the Kuskokwim Region" by P. S. Smith & A. G. Maddren, p. 288.

**Report by writer on the "Red Devil Group" (Quicksilver Prospect), p. 4.

***U. S. G. S. Bull. 655, "The Lake Clark-Central Kuskokwim Region, Alaska" by P. S. Smith, p. 140.

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Geologist of the

many places close-folded with both strike and dip variable. The general trend is N. 20 to 30° W., mainly with steep dips north and south. Injected into the sediments along bedding and fault planes are sills, lenses and dikes. These are numerous, irregular and apparently from the same magma. They range from narrow stringers to dikes and lenses up to 50 feet wide, and near Barometer Mountain of greater widths. They appear to have been injected during the folding and distortion of the sediments. They are acidic in composition, porphyritic in texture, light in color, and contain glass, quartz, calcite, fine metallic sulphides and various other minerals. These were determined, megascopically, as andesite lava dikes, sills, etc. The formations noted on this group consisted of the various contorted sediments and the various dikes.

The showings on this group are confined to a contact between concretionary sandstone and folded and schisted slate or shale. The latter contains a fractured and crushed dike paralleling the strike of the contact N. 40° W. The ore occurs in the various cuts, trenches and strippings along the contact for a known distance of 500 feet. It is also present in the tunnel which crosscuts the strike of the sediment across a width of 50 feet. The ore minerals occur as small seams and disseminations in the schisted shales and the fractured and crushed dike.

The various surface cuts and trenches were more or less filled and due to the oxidization the ore limits, other than in the tunnel, could not be determined. The general impression is that the ore zone is of a narrower width on the surface than that which shows in the tunnel. The structure is definitely a sheared zone which has schisted and fractured both the dike and shales. The concretionary sandstone is more compact and harder in nature and forms the one definite wall of the ore zone. For further description of this deposit refer to a report by Frank W. Holzheimer.*

Mineralization:

The only mineral that occurs in the ore in economic amounts is cinnabar. Associated ore minerals are stibnite, realgar and orpiment, with traceable amounts of gold and silver, the latter two noted in assays. The cinnabar is more generally distributed while the others are more concentrated in small masses and in localized areas. The gangue minerals consist of the various altered minerals of the dike and shales. These are calcite, chlorite, graphite, and various silicates. The content of metallic mercury is determined by the various channel samples, shown on the sketch. The seven 5-foot samples represent a continuous sample across the larger and most mineralized portion of the zone. Assays range from 0.7 to 2.1 per cent metallic mercury, averaging better than one per cent. (Note assays on sketch).

*A Report of the Quicksilver Resources of the Kuskokwim River District, Territorial Dept. of Mines, 1926.

The property is equipped with a Pacific Foundry retort, 12 inches by 4 feet, and a cabin near the tunnel portal. There is considerable small wood for retorting in the vicinity. Suitable lime deposits are found up the Holitna River, a distance of 80 miles.

Nick Millick of Sleetmute states that the Parks Estate has authorized him to option this property for the sum of \$30,000 to be paid out of gross returns at the rate of fifteen per cent of the gross. No down payments are required.