

REPORT ON EXPLORATION IN THE CHANDALAR DISTRICT, 1962

During August 18 to 21, 1962, James A. Williams, Director of the Division of Mines and Minerals, and Robert H. Saunders, State Mining Engineer, made a trip to the Chandalar District, where the Little Squaw Mining Company is exploring for gold lodes. The trip was made via Wien Alaska Airlines by way of Bettles, and, at the time of the flight in, good weather made a landing on the Big Creek airstrip possible. On the return, however, it was deemed advisable to walk from the camp on Big Creek to Chandalar Lake rather than risk the weather prohibiting landing at Big Creek.

Exploration in the Chandalar by the Little Squaw Mining Company began in 1960, when the company reopened underground workings on the Mikado lode and drove more than 600 feet of new underground workings. More than 11,000 tons of ore was blocked out by this work. In 1961, buildings and equipment on Big Creek were purchased from the Chandalar Mining Company, and, in 1962, with OME assistance, the Little Squaw Mining Company began trenching on some of the veins in the district. Eskil Anderson is in overall charge of the exploration work, and Frank Birch is in direct charge; four other men are employed. Two tractors that formerly were used for placer mining on Big Creek are being used for trenching and road building. The camp buildings purchased from the Chandalar Mining Company are used as living quarters. If the trenching program is successful, the OME contract probably will be continued to provide for additional underground work.

By mid-August of 1962, the trenching had traced the Midado lode from the portal in the Tobin Creek drainage over the divide to

the Big Creek side of the ridge, a distance of more than 3000 feet. A trench on Big Creek 100 yards downstream from Toussaint's mill had uncovered a 30-ft-wide quartz vein believed to be what has been called the "Indicate" vein. The quartz in this vein is iron-stained, but no other minerals are visible in it. Also, by mid-August, an access road had been built to within one-half mile of the Little Squaw vein. This vein is exposed in an adit 120 ft long on the left limit of upper Little Squaw Creek. The adit is four feet wide, and the vein is at least as wide as the adit. The vein also is exposed in some old hand-dug pits above the adit. Free gold is visible in pieces of quartz on the dumps. After the remaining one-half mile of access road is completed, more of this vein will be exposed by trenching.

In conjunction with the trenching in 1962, the Little Squaw Mining Company built 7 miles of access road from the camp on Big Creek to the areas in which trenching was planned. The road is mostly on ridges and hillsides that are covered by talus that is permanently frozen except for a few feet of summer thaw. The road has been built by using bulldozers with angle blades, excavating only enough talus for an 8-ft-wide roadway. Blasting has been necessary in only a few places where the talus cover was lacking or thin. Although no culverts have been used in the road, it is planned that open-top culverts eventually will be installed.

A Willys Jeep station wagon with four-wheel drive is used in traveling from the camp to the different working places. Some of the switch-back turns on the steeper slopes are too sharp for the Jeep to negotiate without backing, however, they were made in that manner

because frozen ground was encountered, and, after the permafrost recedes from the excavated areas, it is expected that these turns can be widened easily. The road has been essential for the exploration program, and, although it would not be passable for a conventional automobile, it is serving the purpose for which it was built.

The airstrip on Big Creek can be approached for landing by aircraft from only one direction - downstream. Beyond the upstream end of the airstrip, the ground rises so abruptly that, after an airplane begins its approach, it must land; there is no space in which it can circle for a second try. Frequently, visibility on upper Big Creek is poor, even when visibility is good between Chandalar Lake and Bettles. Cross winds in the valley are common, and, even when visibility is good, wind may make landings impossible. The trail from Big Creek to Chandalar Lake (about 8 miles) is passable by tractor during part of the year but at other times can be traveled only on foot; it traverses several swampy areas. Because of these conditions, mail and freight for the exploration project usually are left at Chandalar Lake, and the lighter items are back-packed to the Big Creek camp. Items too heavy for back-packing accumulate at the lake until weather conditions are good enough to permit landing on the Big Creek airstrip. From time to time, exploration work is delayed or hampered because a needed item is at the lake and cannot be flown or back-packed to the camp. A road from the existing road network to the airstrip at Chandalar Lake is needed badly.

The route that appears most feasible for such a road leaves the existing road near the Mikado workings and goes around the

head of Tobin Creek, down the ridge on the right limit of the creek, and across the creek to the airstrip. All of this route is over the same type of terrain that the present road is on, except for about one mile near the airstrip and across the Tobin Creek valley. This one mile of road is swampy and would require some fill. The chief obstacle to building the road down to Chandalar Lake is that no equipment suitable for transporting the necessary fill is available in the area.

College, Alaska
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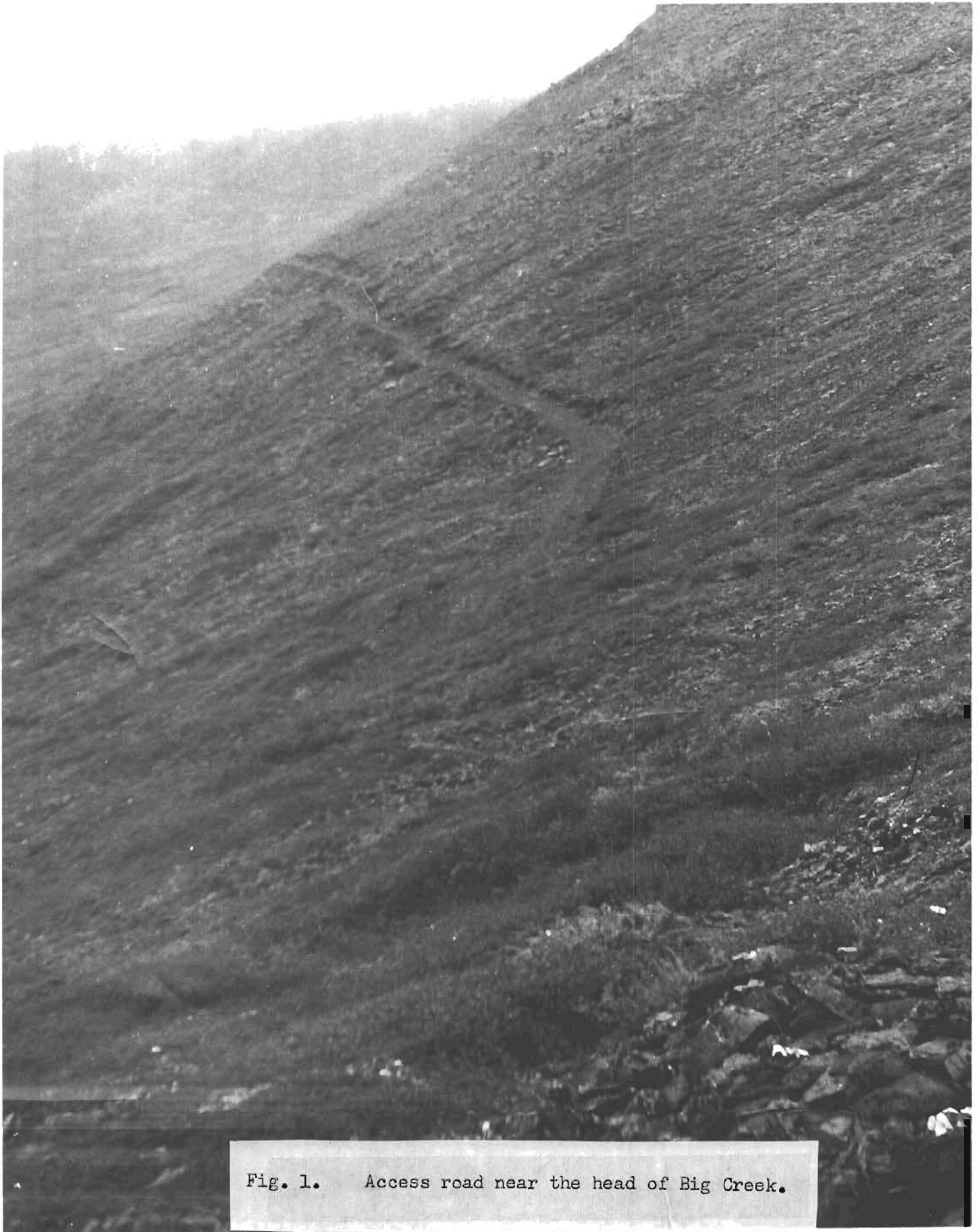


Fig. 1. Access road near the head of Big Creek.