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This group of eight located claims, formerly known as the O.K. group, is owned by Nick Forsberg and associates of Barriere. It is in the valley of Birk Creek one half to 1½ miles from Carl Johnson's ranch at the end of the North Barriere Lake road. A good pack-horse trail follows the creek.

The valley of Birk Creek is steep-walled and heavily covered with timber. The rocks comprise a sedimentary series that dips flatly to the south; the beds are in many places horizontal and the greatest observed dip is 30 degrees. They are dominantly argillaceous to silty sediments and are altered locally to light grey phyllites and to sericitic and chloritic schists; one limestone horizon is noted, and some fine quartz-pebble conglomerate or grit.

Pyritic replacement is seen in a number of places, and follows bedded zones in which there is a more than average degree of schistosity; much of this mineralization has a siliceous base. Irregular vein-like bodies and vague, formless masses of quartz are common, but the quartz is on a rule barren or nearly so. In these deposits, which vary in thickness from a fraction of an inch to several feet, pyrite is the dominant mineral, and locally constitutes 90% of the rock mass; other sulphides, present in variable proportions and minor amount, include chalcopyrite, sphalerite, galena and pyrrhotite. Gold and silver values are low. A total of ten short adits

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and one adit 160 feet in length are driven on both sides of the creek, not far from an old camp-site at an elevation of about 2,500 feet  $1\frac{1}{2}$  miles from the ranch. These adits all explore bedded pyritic mineralization of replacement type and will be described briefly.

(1.) One thousand feet up stream from the old camp an adit is driven southward 50 feet in the south bank of Birk Creek. Green chlorite schist dips flatly to the south and is, throughout the body of the adit, bleached and mineralized with streaks up to 10 inches thick of pyrite and small amounts of spalerite, galena and chalcopryite. A sample milled across 40 inches of quite heavily mineralized material assayed: Gold, 0.02 oz. per ton; silver, trace; copper, 0.9 per cent; lead, 0.7 per cent; zinc, 1.3 per cent.

Some 150 feet farther upstream at the same general horizon are mineralized bands, up to 12 inches in width, poorly exposed across several feet. A sample of one of the better bands, 10 inches thick, assayed: Gold, trace; silver, 0.8 oz. per ton; lead, 0.7 per cent; zinc, 5.7 per cent.

(2.) At the old camp site, on the south bank of the creek, is a natural bluff 20 to 30 feet high and some 200 feet in length. The gently dipping rocks here exposed consist of chlorite schists below limestone and calcareous schists which are in turn overlain by quartz-pebble conglomerate or grit. There has been considerable silicification

and injection with irregular and discontinuous masses of quartz. Pyritic mineralization, including minor amounts of sphalerite, galena and chalcopyrite, occurs in bedded seams and locally in minor amounts in the quartz masses. These seams are locally abundant over widths of several feet and some but not all occur preferentially in silicified limestone. Five short adits explore the mineralization in and just above the bluff.

(3.) Nine hundred feet downstream from the camp is a 12-foot adit driven in the south bank of the creek. The adit follows a heavily pyritic band containing a little chalcopyrite and from a few inches to 26 inches in thickness.

(b.) North-east of the camp and 375 feet vertically above it are two adits in locally schistose, calcareous argillite that dips 16 to 18 degrees southward. One adit is driven north 20 feet and exposes a 12-foot thickness of bedded pyritic mineralization in numerous single bands as much as 10 inches in thickness. Besides pyrite there are minor amounts of pyrrhotite, chalcopyrite and traces of sphalerite and galena. Two samples holed across a width of 7½ feet near the face assayed nil in gold and silver and a trace and 0.2 per cent copper.

A second adit, 50 feet south-east of the first, is driven 15 feet eastward in grey calcareous to quartzose phyllites in the footwall of a 2½-foot band of massive pyrite replacement. Similar bands of pyrite 5 feet and 1 foot thick

are 8 and 11 feet above the adit respectively. Irregular masses of barren quartz are found in this general vicinity, and a fault-zone between the adits is accompanied by irregular quartz.

(5.) North of the camp-site and 180 feet vertically above it is a caved short adit within which there is said to be a shallow winze. Material on the dump, not seen in place but reported to have come from the winze, consists of silvery chloritic schist and contains considerable siliceous mineralization including pyrite and less sphalerite, chalcopyrite and galena. A sample of some of the better of this material assayed: Gold, 0.02 oz. per ton; silver, 1.6 oz. per ton; copper, 0.8 per cent; lead, 2.7 per cent; zinc, 8.5 per cent. Width and attitude of this mineralization are unknown, but the formation here dips nearly 30 degrees southward.

An adit 80 feet lower in elevation on the steep hillside has been driven northward 160 feet to reach well north of the upper adit. The bedding is horizontal or nearly so, and it is clear that this adit has been driven too low to intersect the mineralized zone above, which dips flatter than the hillside.

Much pyrite is seen in the rocks for 50 feet stratigraphically above the upper adit.

(6.) One half mile from Johnson's ranch, on the north bank of the creek, are some poorly exposed showings in flatly dipping sericitic schist. Some stripping indicates pyritic

bands over a width of more than 3 feet but does not prove full width or extent. A sample of an 8-inch band of pyritic mineralization assayed: Gold, trace; silver, 0.6 oz. per ton; copper, 1.6 per cent; lead, 0.8 per cent; zinc, 6.6 per cent.