Autha-? Bancroft ? 003973

82K/13W

82K/NW-75

Newmarch

By [illegible]

T. [illegible]

ASBESTOS GROUP MANGANESE

L 50-117

This property consists of the mineral claims Asbestos Group No.'s 1-8 inclusive, owned by the partners J.T.Lauthers and Dan McIntosh, of Revelstoke. The property is on the west slope of Spraat Mountain, and may be reached by a trail three miles in length. The trail leaves the highway at Sidmouth station, crosses farmland owned by R.A. Pilkey, and follows the old highway grade for one-half a mile, where it turns north-easterly up the hill. The trail , which at present writing is in good condition, continues on a uniform grade for two and one-half miles to the cabin on the asbestos showings at an elevation of 4200 feet. From the cabin a trail continues north-easterly for approximately one quarter of a mile to the workings.

The workings extend over a horizontal distance of 435 ft., and a vertical distance of 145 ft. between elevations of 4440 and 4585 ft.

The moutainside in the vicinity of the workings is steep, well timbered with spruce, pine , and fir, and there is considerable underbrush. Outcrops, except near the showings, are rare.

The cabin, which is in good condition, commands an excellent view of the Columbia River Valley, and of Upper Arrow Lake. Water may be obtained from a small spring 50 yds. east of the cabin.

The manganese occurrence has been described by Bancroft[1]

The workings lie along the eastern border of a band of serpentine in greyish quartzites and phyllites, part of the Hamill Series of late Pre-Cambrian age.The serpentine carries magnetite and some carbonate. The sediments have a rather uniform attitude, striking north forty to north forty-five degrees east and dipping from forty-five to sixty degrees to the south-east.

The quartzite is fine-grained ,greyish in color, often transected by lenses,veins, or anastamosing stringers of quartz.

The phyllite is dark brown to dark blue in color, has uniform,well-developed, pearly cleavage planes and is sometimes schistose.

[1] Bancroft,M.F. Geol. Surv. Canada,, Summ. Rept. 1921,pt.A,p111.

13

The greenstone is fine-grained dark greenish-grey in color but alters to a uniformly brownish rock. It carries some pyrite and magnetite and exhibits two well-developed directions of jointing.

ORE ZONE

The manganes ore (carbonates of iron, manganese, calcium, and magnesium) varies from white to dark grey in color, and occasionally shows a slight pinkish tinge. It effervesces vigorously with cold concentrated hydrochloric acid. Essentially it is confined to an area eleven and one half feet by seven and one-half feet in area in Open Cut "A" (See plan) Blasting exposes it for 5 feet down the dip. A few inches of carbonate were observed in Open Cut "B". Considerable wad, derived by oxidation of the carbonate is evident at the surface and in the fissures of the carbonate. The wad is generally earthy, jet black in color, and carries considerable limonite,, occasionally it is hard and massive. Manganese and iron stain are common in the area between Trench No.2 and O pen Cut "B".

The carbonate , which carries a little pyrite and magnetite, occurs as a replacement of the greenstone sill. The replacement at Open Cut "A" is complete, no vestiges of original minerals remain, but at Open Cut "B" carbonatization is slight.

Cross-joints have exerted structural control in the emplacement of the carbonate ore-body. In Open Cut "A" cross joints strike one hundred and ten degrees and dip eighty-five degrees to the north east. Similar joint planes are apparent in the greenstone in Open Cut "B", and also at the outcrop shown at the southern limit of the accompanying map sheet.

Another set of joints, equally well-develop ed and striking zero degrees, dipping eighty-five degrees west, apparently exerted no structural control on the ore.

Two feet north-eastward, at right angles to the strike of the cross joints, from Open Cut "A", the carbonate dies out, and strong magnetite mineralization is evident. The same effect was noted in travelling south-westward from the cut, within a foot of the edge of the cut magnetite appears to take the place of the carbo-

13

Quartz veins and stringers cut the carbonate, the greenstone, the quartzite and replace the phyllite. No manganese minerals were observed in any of the quartz veins.

Though the carbonate appears to be a primary replacement, it is extremely local. There is, however, sufficient carbonate to sink a shaft, down the dip and remain within the ore.

Some time was spent prospecting within a radius of approximately one mile of the showings, but no manganese was discovered. Eight hundred feet vertically above the showings, a large bloc k of marble, apparently float, was noted. Presumably the limestone, as shown on Canadian Geological Survey Map 235A, is not far from the surface at this point.