1922

Station State

ROAD LOG

REEVES MacDONALD MINE TO NELSON

From the Reeves MacDonald mine eastward to the Border crossing point at Nelway the road crosses an area containing Middle Cambrian carbonates of the Metaline (Nelway in Canada) Formation. The formation is several thousand feet thick and the few outcrops along the side of the road are grey dolomite of the central part of the formation.

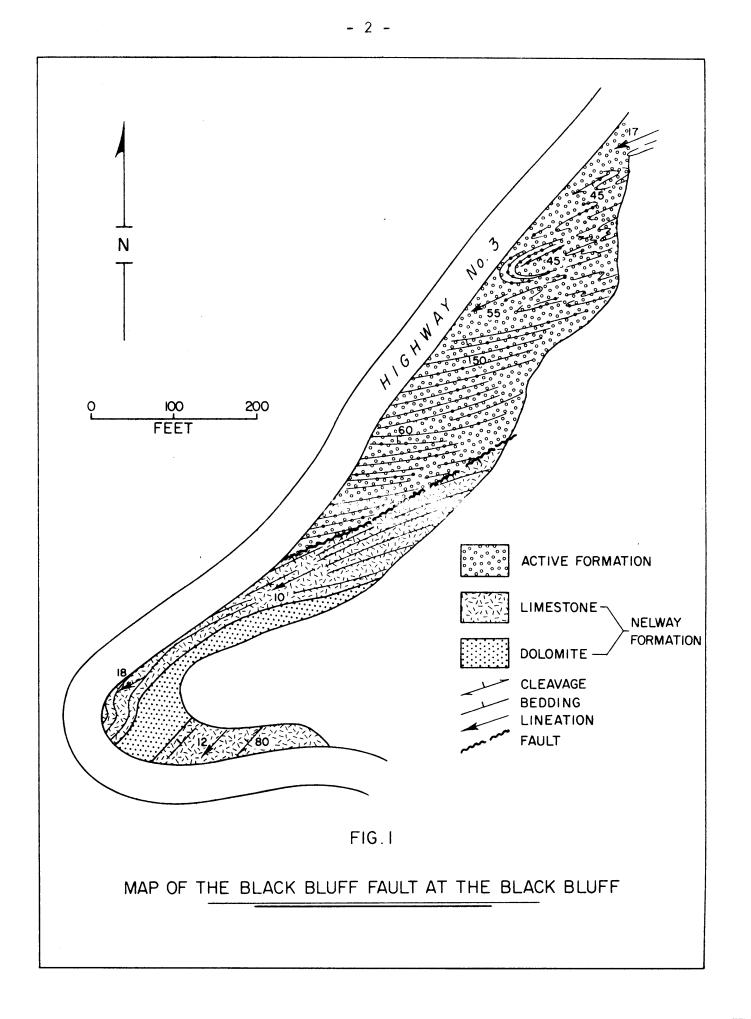
For the first 3 miles north of Nelway, Highway No. 6 passes through the Eastern structural belt of the Salmo area and the rocks exposed belong to the Lower and Middle Metaline Formation. Rock cuts on the east side of the road just north of the customs house and in cliffs west of the road as far north as the Texaco station are argillaceous grey limestone of the Lower Metaline which dips at low to moderate angles to the west. Middle Metaline grey dolomite forms a lenticular buffweathering band in the cliff west of the Texaco station and also caps the small hill to the north.

(Black Bluff, 3.3 miles north of Nelvay.) At a sharp curve in the road 3 miles from Nelway the route crosses the Black Bluff fault passing from the Eastern structural belt into the Black Argillite belt containing carbonaceous argillite, siltstones, and calcareous rocks of the Active Formation which are correlated with the Ledbetter. These rocks are well exposed near the sharp curve in the high rock cut facing the Salmo River, known locally as the Black Bluff (see Fig. 1). From here northward to within 8 miles of Nelson the road follows the Salmo River which flows southward and westward to join the Pend d'Oreille 4 miles west of the Black Bluff.

About half a mile north of the Black Bluff a straight stretch of the road permits a good view of Iron Mountain and the lead-zinc and tungsten mines of Canadian Exploration Limited (see Fig. 2).

(Road junction Highways Nos. 6 and 3, 6.4 miles north of Nelway.) The highway passes from the Black Argillite belt into the Mine belt near the road junction (stop sign) 3 miles north of the Black Bluff. Prominent cliffs of grey and white Reeves limestone form the eastern wall of the Salmo Valley. These rocks dip at moderate





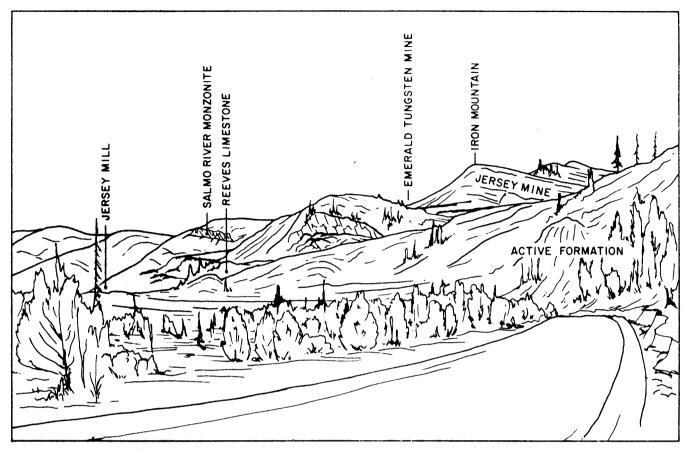


FIG.2 VIEW OF IRON MOUNTAIN FROM No.6 HIGHWAY NORTH OF THE BLACK BLUFF

angles to the south and are in an overturned position on the lower limb of the recumbent Jersey anticline. The top of the Reeves limestone, the Emerald member, and the stratigraphically higher (but structurally lower) rocks of the Laib Formation occur along the east side of the valley above the Stagleap Ranch about a mile north of the No. 3 highway junction.

Mica schists and micaceous quartzites of the Laib Formation containing prominent sills of felsite form the eastern side of the valley for 5 miles north of the No. 3 highway junction. Granitic rocks form the western side of the valley in this area.

(Jersey Concentrator, 9.0 miles north of Nelway.) The Jersey lead-zinc

concentrator is on the highway 2.5 miles north of the No. 3 highway junction. A conveyor in a series of tunnels connected by raises was used to transport crushed ore from the mine 1 1/2 miles to the east.

Two miles north of the Jersey mill the route passes out of the Mine belt into an area of Mesozoic volcanic and sedimentary rocks and continues in these rocks to within a few miles of Nelson. The Waneta fault, probably an old thrust, separates the Mine belt from the Mesozoic volcanic rocks and is exposed 2 miles north of the Jersey mill in outcrops east of the highway.

(Salmo, 15.7 miles north of Nelway.) Salmo is the main commercial centre for the mines of the area to the south and east. It is at the junction of Highway No. 3 which runs west to Trail, and No. 6 which runs north to Nelson. The steep slope east of the town is composed of granitic rocks of the Hidden Creek stock, part of the Nelson plutonic suite. White outcrops of these rocks can be seen on the west side of the valley north of Salmo for 4 miles.

Between 5 and 6 miles north of Salmo several dumps of mines in the Ymir gold camp are visible. A view from the highway 5.5 miles north of Salmo is shown on Figure 3. The heyday of the Ymir gold camp was between 1896 and 1908 when it was known as the largest gold camp in the British Empire. Mining activity revived between 1934 and 1940 but since then there has been essentially no production. Total production from the camp has amounted to 262,000 ounces of gold, 1,432,000 ounces of silver, 28,799,000 pounds of lead, and 18,970,000 pounds of zinc from about 900,000 tons of ore. The largest producers were the Ymir mine northeast of town, the Yankee Girl and Centre Star (Wesko) mines. In the early days of the camp, stamp mills were erected at many of the mines and some ore was shipped to the Hall smelter in Nelson. In later years ore was carried by aerial tramways to mills on the railway near Ymir. The deposits of the Ymir camp are quartz veins trending between east and northeast and containing pyrite, pyrrhotite, galena, and sphalerite. They occur mainly in Mesozoic [Triassic (?)] argillites of the Ymir Group cut by complex small granitic intrusions.

(Ymir, 23.7 miles north of Nelway.) Ymir in Norse mythology is the primeval giant from whose body the gods created the world, and this name reflects the

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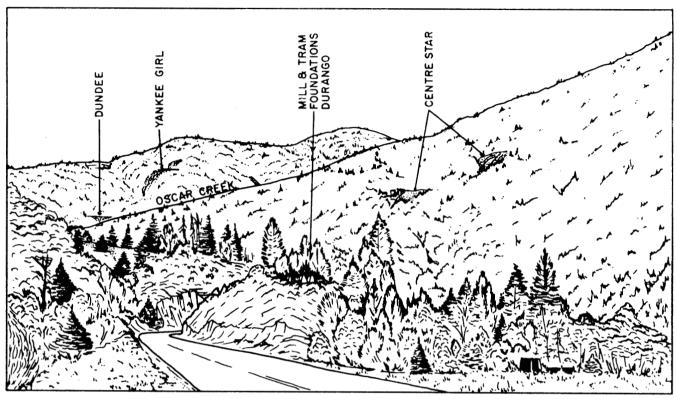


FIG.3 MINES OF THE YMIR CAMP FROM №.3 HIGHWAY SOUTH OF YMIR

early influence of the Norwegian miners in the Kootenays. Little remains of the original town which was a thriving community about the turn of the century. Two of the original hotels (the Palace and the Prince Charles) can be seen a block west of the highway. Tailings from the Yankee Girl mill forms an ochre-coloured flat east of the Salmo River opposite the town.

North of Ymir the route follows the strike of a group of metavolcanic rocks and dark grey argillites of the Jurassic Rossland Group. In this area the dominant foliation passes from an eastward dip south of Ymir through the vertical to a moderate westward dip near Nelson which is characteristic of all the metamorphic rocks near Kootenay Lake.

(Outskirts of Nelson, 40 miles north of Nelway.) Rock cuts on the northeast side of the road are quartz monzonite and granodiorite forming the southerm part of the Nelson batholith.

(Nelson bridge, 42 miles north of Nelway.) In the view southward from the Villa Motel at the western end of the Nelson bridge, Toad Mountain and the area of the Silver King mine are clearly visible as indicated on Figure 4. The original claims of the Silver King property were staked by the Hall brothers in 1886 and production of ore began in 1889 and continued intermittently until 1948. In this period 222,000 tons of ore was shipped which contained 14,946,000 pounds of copper (3.4 per cent), 4,441,000 ounces of silver (20 ounces per ton), and small amounts of gold, lead, and zinc. This mine and the surrounding gold-silver veins resulted in the construction of the Hall mines smelter at Nelson in 1896 to treat copper and silverlead ores. Copper ore was treated for only four years but silver-lead ore was shipped to the smelter until 1904 and perhaps later.

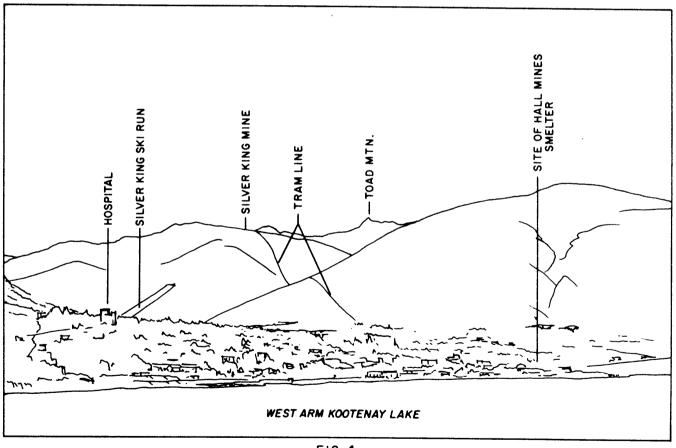


FIG.4 NELSON AND TOAD MOUNTAIN FROM THE WESTERN END OF THE NELSON BRIDGE