ZINC ORE OCCURRENCE

ping vertical beds of limestone of the Ueberroth mine are said to have been separated by a few feet of zinc ore. This ore was in part the filling of the original narrow openings between the beds, but mainly the replacement of the adjacent limestone. Joints, generally perpendicular to the beds, likewise furnished places for ore deposition. Accordingly blocks of limestone entirely surrounded by ore were occasionally noted. One gathers from the descriptions that the main veins were on bedding planes. Persistent veins were followed downward to a depth of 200 feet in the workings. Names were given to some of the veins.

The thickness of the ore zone was variable. It is reported to have been about 20 feet in some places, 30 to 50 feet in others. Clerc speaks of six parallel crevices (bedding plane openings) having been worked and “about as many crossings” (joint plane veins).

The strike and dip of the main ore bodies is fairly regular in each of the mines. The ore bodies pitch along the strike to the southwest at an angle of about 20°. The vein of the Correll mine, which came to the surface in the open cut, was encountered in the New Hartman mine at a depth of 110 feet. The main ore body of the Ueberroth mine seems to pitch westward. Although considerable prospecting has been done east of the Friedensville-Colesville road along the strike of the main Ueberroth veins, no ore has been found. The ore-bearing horizon, rising to the east, has probably been eroded.

The veins parallel to the limestone strata striking of N.80°E. were remarkably persistent. The Stadiger vein in the Ueberroth mine was worked along the strike for about 1,000 feet. On the other hand, the cross veins following the joints with an average strike of N.10°W. were comparatively short. Where the two sets of veins intersected, the ore bodies were largest and richest. Some of these masses of ore were as much as 60 by 20 feet in cross section.

The vertical extent of the ore bodies has not been announced by the company that has carried on the diamond drill prospect work. Ore was found to the greatest depth explored by mine operations, which was about 300 feet at the New Hartman mine. It definitely continues much deeper. The tenor of the ore as revealed by diamond drilling has not been revealed.

The oxidized ores, which have been practically exhausted in both the Old and the New Hartman mines, were found near the surface in deep pockets that were formed by solution in the limestones, and were associated with residual clay. In the Ueberroth mine the oxidized ores persist to the greatest depth reached, probably in relatively diminished quantity, but of unchanged quality. At lower depths, however, they occur, like some of the blende, as the filling of fissures in the limestone. Most of the blende, however, is a metasomatic replacement.

In some of the parallel veins that are only short distances apart, the blende was found almost at the surface, whereas in others the oxidized ores were abundant at a depth of 200 feet. This irregularity was a serious drawback in working the mines because it was undesirable to mix the two classes of ore.