

State Department of Geology and Mineral Industries

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Portland, Oregon

COX CHROMITE DEPOSITS

Illinois River Area

The deposit from which Cox is shipping ore at the present time is located near the center of the N.E. quarter, Sec. 36, T. 37S, R. 10W, at an elevation of about 3100 feet. It lies on top of a rounded hill northeast of Pearsoll Peak. To reach this deposit, Cox has built about four miles of road including an ~~expansion~~ bridge across the Illinois River at the mouth of Dailey Creek. I understand that this road and bridge cost about eight thousand dollars. It is steep in several places, narrow, crooked, and rough.

The chrome body which Cox is mining occurs in a greatly weathered serpentine mass. The ore body is exposed by two shafts about 25 feet apart; the oldest working being on the west. The first shaft sunk is 23 feet deep and is lagged on all sides. Between it and the second shaft is a trench which exposes a chromite band up to six inches wide. The second shaft consists of two parts; one about six feet square and 15 feet deep joined on the west by another, 7 x 15 feet, and at the time of examination, was forty feet deep. The ground is not solid, so the shaft must be lagged. The ore body in the second shaft appears to trend about N. 60 E. with a 70° N.W. dip.

So deep and complete is the weathering of the serpentine and ore that practically no blasting is needed. Even at a depth of forty feet some of the ore could be squeezed in a clay-like ball in the hand. It is reported that some five hundred to six hundred tons of chromite has been produced from this deposit.

A geophysical survey was made by Holsworth who told me that there is a good chance for extension of the ore body. About a hundred feet southwest of the shafts is a trench made by a bulldozer. This is about a hundred feet long and up to fifteen feet deep. This exposed weathered clay²serpentine. At the south end of the trench there is a small outcrop of serpentinized saxonite. Some prospecting with a bulldozer was done east of the shaft.

About a quarter of a mile northeast of this deposit along the road is a pit about six feet square and four feet deep exposing a band of chromite. According to Meyers, about twenty-five tons of ore was taken from this deposit.

W.A.G. Bennett
Field Geologist
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