

DALLAS MANGANESE

Owner: A. E. Ullman, Salem, Oregon.

Location: NW $\frac{1}{4}$ sec. 36, T. 7 S., R. 6 W. Exposed only in the bank and the bed of Rickreall Creek.

Geology: Rickreall Creek flows over fine- to coarse-grained yellow, gray, and green tuffs, which at the locality are well bedded, but to the west are quite massive and even grained. Near the deposit the coarse-grained (2-5 mm) bands, from 6 to 18 inches thick, form ridges which stand out from the medium grained ($\frac{1}{2}$ to 1 mm) bands, from 1 to 2 feet thick. The coarse-grained beds are reddish in color; nearly all the medium and fine-grained tuffs are greenish or gray. The tuffs strike N. 80° E., and dip 15° W. at the locality; 100 yards upstream to the west they strike nearly due north and dip 5° east; 50 yards farther upstream they are nearly horizontal. The major jointing systems in the tuff strike N. 25° W. and generally dip 30° E., but some are vertical.

The tuffs are intruded, at the locality, by dense fine-grained black basalt. The contact is quite irregular, and the basalt is highly brecciated in places along the contact. Downstream from the locality the creek flows over basalt.

The north side of the creek consists of a steep 20-foot bluff of gravels which forms a relatively level terrace 50 to 200 feet wide and more than half a mile long. A similar less well-developed terrace appears on the south side of the stream, but the bluff is lacking on this side. Beyond the terrace on the hillsides both upstream and downstream from the locality basalt was the only rock seen.

Near the contact of the basalt and breccia with the tuff, the tuff is cut by thin veinlets (less than half an inch thick) of a manganese mineral (probably hausmannite), which, when it penetrates to the coarse-grained beds of tuff, spreads out and disseminates into the interstices between the tuff grains to form the matrix between the angular fragments. The coarse beds contain from 10 to 14 percent manganese. Samples were taken as follows:

<u>Sample number</u>	<u>Description of sample</u>	<u>Thickness of sample</u>	<u>Percent Mn</u>
PA 7	Coarse red tuff	14 inches	10.57
PA 11	Coarse red tuff	6 "	10.69
PA 12	Grab sample of high-grade from coarse red tuff	----	14.97

The exposed outcrop of ore is about 20 feet long and not more than one foot thick. The manganese dissemination is irregular, and in the absence of exploration work the extent may not be predicted.

Report by: J.E.A., 1941

FERRUGINOUS BAUXITE DEPOSITS

See "Ferruginous Bauxite Deposits," (page 133) Marion County.