

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

Report by N. S. Wagner
Date March 7, 1944

POWDER RIVER CONSOLIDATED MINES COMPANY (Iron) Sparta District Baker County

OWNERS

F. M. Gunn, Medical Springs, Oregon

Walter Gardner, Union, Oregon

M. R. Wallis, 4710 University Way, Seattle, Washington

AREA & LOCATION

720 acres of deeded land (Clyde Wilkins Property)

together with four claims in Townships 8 & 9 S.,

Range 44 E. Sections 32-33 and 3 & 4 respectively as

illustrated on accompanying map. Distance to shipping point, Baker, is 35 miles.

TOPOGRAPHY

Rugged, with hills about 3000' elevation cut by ravines and draws.

DEVELOPMENT

Prospect pits on four widely separated occurrences of iron, two of these pits being of rather ancient vintage and so sloughed in that they show only loose blocks of ore.

GEOLOGY

The country rock in this region is a highly weathered albite granite with small areas of basic differentiates and irregular masses of quartzite and micaceous schist included locally.* Thick basalt flows blanket much of the surrounding country and thinner tongues and remnants occur within the area of these holdings. Ross, in his discussion of one of the basic differentiates (gabbro) situated a short distance down the river from these holdings mentions considerable pyrite and black iron.

*C.P. Ross - The Geology of Part of the Wallowa Mountains - Bull. 3 State Department of Geology & Mineral Resources, page 46.

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

POWDER RIVER CONSOLIDATED MINES COMPANY (cont.)

Page 2

This constitutes the only reference to any deposits of iron in this district. While it is apparently closely associated with the gabbro there, that on this property occurs either in the schist or the weathered albite granite.

The iron is massive hematite, deep red to almost black in places, with relatively little limonite. Grab samples consisting of large chunks from three different occurrences assayed between ^{66.78} % and 68.5 % Fe and showed an average of 1.0 % TiO_2 , a maximum of 0.017 % Phosphorus + but a trace of sulphur.

It occurs in small, independent lenses. The four inspected are separated from each other by distances ranging from several hundred yards to three quarters of a mile, and other reported showings are at even greater distances.

The largest lense seen is situated near the crest of a large, steep hill located approximately in the $SE\frac{1}{2}$ of the $NE\frac{1}{2}$ of section 4 about a quarter of a mile north of the Richland highway. Here a prospect pit exposes iron for 25 feet and shows it to be 3' thick, striking N 85 W and dipping 45 degrees to the south. Although the west end of this pit is on the break of the hill, Mr. Gardner reports having found no trace of iron down the steep hill to the west. However, unprospected croppings do appear on the relatively flat top for an estimated 50' to the east. A local gully crosses the strike at this point and no further iron was seen on either slope, or beyond, for nearly 400 yards.

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

Page 3

POWDER RIVER CONSOLIDATED MINES COMPANY (cont.)

The other showings were not exposed as well as the one just described, but they contain the same kind of iron and appear to be much smaller. Mr. Gunn and Gardner report two other occurrences which were not visited. It is altogether probable several additional ones exist and are to be found at scattered points in the hills adjacent to the present holdings.

ECONOMICS

While from an assay standpoint this iron is quite attractive, and while new and possibly larger lenses may be found, the aggregate tonnage of all ore seen is so insignificant in comparison with other known deposits, and the likelihood of developing any appreciable additional tonnage is so remote that any serious thought of exploiting it is wholly unwarranted.

N. S. Wagner
Geologist