

SMITH MANGANESE DEPOSIT

The Robert Smith manganese deposit is one and one half miles due east of Gold Beach, Oregon and U.S. Highway 101, in the NW $\frac{1}{4}$ sec. 5, T. 37 S., R. 14 W., at the head of a tributary to Riley Creek. The deposit is 65 miles north of Crescent City, California and 78 miles south of Coquille, Oregon.

The deposit is unique in that it is the first recorded occurrence in Oregon of neotocite, the hydrated manganese silicate. The country rock is serpentine, which encloses a chert lens composed of a white, cryptocrystalline chert and a red "jaspery" chert, identical to other chert lenses in the region. The manganese minerals are limited exclusively to the red chert, but lack of sufficient exposures prevented the determination of the structure and the relationship between the white and red cherts.

Neotocite is the principal manganese mineral. Psilomelane and wad are prominent on seams and fissures where they have formed by the alteration of the neotocite. The neotocite probably formed by the alteration of a primary silicate of manganese, probably rhodonite, by a type of alteration in contrast to that at the McAdams property, where the rhodonite altered directly to psilomelane by oxidation and leaching out of the silica.

CONCLUSION

Evidence indicates that the manganese associated with the chert lenses in the southern Oregon coastal region was deposited as a siliceous spring deposit simultaneously with the chert deposition. The McAdams deposit was formed when circulating hot waters related to a basaltic intrusion altered the manganese oxides to rhodonite and concentrated the manganese in the chert lenses as pods and boulders. The source lode will probably be a variably mineralized zone consisting of masses of rhodonite and rhodonic chert partly altered to psilomelane.

The extent of the mineralized zone cannot be determined but further prospecting, trenching, and test pitting along the contact zone may uncover more manganese. The manganese boulders probably had their source near the present sandstone-schist contact, but the surface exposures have been so disturbed by soil creep and landsliding that accurate predictions may not be made.

Manganese deposits in the chert lenses are small and frequently low in manganese and high in silica, yet if the conditions of the occurrence of the manganese in the chert are realized, there is every possibility that other deposits of commercial manganese ore may be found. The deposits, because of their small size, must be readily accessible to be commercial, yet it is desirable that under the stimulus of war time prices all prospects of this type should be investigated.

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

Report By: Randall E. Brown
Date of visit: February 7, 1942

Bob Smith Manganese

Gold Beach Area

Curry County

Black manganese oxides are exposed in two open cuts on the side of the canyon of a stream tributary to Riley Creek, about three miles by trail from Gold Beach, Oregon. The two cuts expose a zone of manganese oxides over a distance of 40 feet. The grade of the manganese is low, the deposit is accessible only by three miles of trail, and the prospect itself would be difficult to work.

Owner: Robert H. Smith "Black Cat" Garage Gold Beach, Oregon

Area: Deeded land

Location: Located about a mile and a half from Gold Beach in an air line, but three miles by trail, at the head of a tributary to Riley Creek, in the NW 1/4 of Sec. 5, T. 37 S., R. 14 W.

Deposit is 65 miles north of Crescent City, California and 78 miles south of Coquille, Oregon, the nearest railhead.

History: Property has been examined by the Golden Surf Mining Interests, Crescent City, California, by H.C. Skeels, Consulting Engineer.

Topography: Deposit is located within a few hundred feet of the crest of the ridge visible to the east from Gold Beach. It is located on the steep south side of a canyon on a spur from the main ridge. The area is heavily covered with vegetation and coniferous forest.

Development work: Two open cuts, each about 20 feet long and 6 to 8 feet high expose the "ore" body. The second (western) cut is to the right of and below the first or eastern cut.

Geology: The deposit is within a large serpentine area, extending east and south from Gold Beach. The manganese oxides occur in a chert zone which strikes about N 20 E and dips 40° SE. The chert consists of an upper, white chert, and a lower or reddish chert. Apparently the manganese zone is either at the top of, or above the red chert, but the heavy cover of vegetation makes determination impossible. Frequent red chert fragments within the "ore" body indicates that the manganese is within the upper part of the red chert.

The manganese oxides are principally psilomelane, with small amounts of pyrolusite and wad near the surface of the ground and on occasional seams and fissures extending from the surface of the ground to the "ore" zone.

The manganese is low in grade, the average is 19% by assay, according to S.O. Newhouse.

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

Report by: R.E. Brown
March, 1942

Bob Smith Manganese

An assay of the samples taken by R.C.T. at the deposit gave the following results:

Channel sample:	24% manganese
Picked sample	30.1% manganese

The mineral was examined in thin section and analyzed spectrographically, and determined to be neotocite ($x\text{MnO} \cdot y\text{SiO}_2 \cdot z\text{H}_2\text{O}$). No bementite or hausmannite, rhodochrosite or rhodonite was noted in the samples taken.

Calcite veins were abundant throughout the rock. Thin sections showed that the rock consisted entirely of neotocite except where traversed by seams of calcite, where the neotocite was altered to an anisotropic mineral presumably composed of the component parts of neotocite and calcite, and possibly related to rhodochrosite or rhodonite.

February 16, 1942

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

SMITH MANGANESE

Gold Beach Area

Heavily iron-stained sediments have been exposed by some open cut work. The total amount of manganese is small and not amenable to concentration. Other areas in this locality might prove more favorable.

Owner: Robert Smith, Gold Beach, Oregon.

Location: SW $\frac{1}{4}$ sec. 5, T. 37 S., R. 14 W., about a mile due east of Gold Beach Ranger station. About 3 miles of road to be built to Gold Beach, then 78 miles by paved Highway 101 to loading points at Coquille.

Area: Deeded land.

History: None.

Topography: Precipitous mountain hillside, average 45° slope, at an elevation of about 1000 feet. Timber principally in second growth fir with some cedar. Heavy rainfall, no snow. Water is not plentiful.

Development: Two cuts made on a very steep hillside expose the rock over a length of 20 feet in one place, and 12 feet just below it.

Geology: The country rock is sandstone that contains red chert; the formation may be Franciscan (Dillard?) upper Jurassic in age. Nearby is a rock that looks like an intrusive basalt. All rocks are deeply weathered and identification is extremely difficult. The sandstone and basalt break into small fragments along fracture planes and these surfaces are covered by black manganese oxides so much of the rock appears to be manganese ore.

The cherts in the development cuts is "glassy" and looks almost like pitchstone. It has been intensely fractured and the zone may represent a fault. The minutely fractured red chert takes on a lustrous black appearance, similar to specular hematite, and is locally identified as "iron ore", "manganese ore", and even sphalerite. Manganese oxides are plentiful on fracture planes and in some minor shear zones; it is pyrolusite and wad.

Exposed areas give little indication of a deposit of manganese ore. Other croppings are reported to the south but were not visited.

Mining: None.

Informant: Ray C. Treasher, 2/12/42

Report by: RCT 2/16/42

February 16, 1942

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

SMITH MANGANESE

Gold Beach Area

The inspection was made at the request of Joe Stankavich, Bandon, Oregon, who appears to have some interest in its development. Neither Stankavich, who developed a sore leg the morning of the inspection, nor Bob Smith, the owner, went to the deposit with me. Harry Foshacht, Bandon, and some man interested in building a road to the "mine" accompanied me; neither had been to the property before.

Rocks of the area are deeply weathered and identification is difficult. It seems that there are igneous rocks (basalt) in the vicinity. All rocks are heavily manganese stained, but no concentrations of manganese were seen. It is doubtful if the owner, or any of the promoters know manganese ore.

Upon our return from the deposit, we were informed that we should have gone southward from the "mine" to see outcrops that are hidden in the brush on very steep hillsides. The location of these outcrops was not clear even to Stankavich, but apparently, we should have prospected the hillsides for them, particularly as he was physically unable (?) to make the trip. It is possible that small bodies of ore may be found; however, as the manganese originated as leachings from the adjoining rock it is doubtful if sufficient ore is found to justify opening the deposit.

Stankavich was "most appreciative" of our work. He long distanced me on January 28th requesting an immediate visit, which was denied for obvious reasons. I made the Coast trip particularly for this inspection; then Stankavich was too lazy (I'm convinced that this is the source of his leg trouble) to accompany me to the deposit. When we returned, he beefed because I didn't do it right. And lastly, he even failed to thank me or the Department for our trouble. The two men who accompanied me, and who have no particular interest in the deposit, were appreciative of my work however; they tried to buy my lunch which I refused as it was not their party, and they even thanked me for the trip.

Personally, I think Stankavich is screwy. I doubt if he knows minerals or ores in even an elementary way. I think he is another of our "busy bodies" with a great desire to talk big and do little. Apparently, he was the source of Gilbert Gable's wild inventories of mineral resources. (This information from Hilton of Port Orford Post).

Ray C. Treasher
Field Geologist
2/16/42

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

Bob Smith Manganese

Gold Beach Area
Cuming

The grade of ore at present exposed is far too low to permit operation. The ore can not be concentrated because it is the normal siliceous ore common to the region. Sufficient water for a concentration plant is inaccessible.

The operation of the deposit would require at least 3.5 miles of road, uphill the entire distance, to the deposit. Part of the road is being built now, toward Grizzly Mountain. Completion of this road might make operation of the deposit feasible if ore of higher grade is discovered.

H.E. Skeels states that higher grade manganese was found on the trail to the north of the present exposure about 200 feet, indicating a body of manganese oxides of considerable size.

Recommendations: Further prospecting is recommended.

Informants: H.C. Skeels, S.O. Newhouse, J.A. Stankovich

CONFIDENTIAL

RECORD IDENTIFICATION

RECORD NO..... W061516
RECORD TYPE..... X1M
COUNTRY/ORGANIZATION. USGS
DEPOSIT NO..... ODDMI 93-191
MAP CODE NO. OF REC..

REPORTER

NAME..... JOHNSON, MAUREEN G.
UPDATED..... 81 04
BY..... FERNS, MARK L. (BROOKS, HOWARD C.)

NAME AND LOCATION

DEPOSIT NAME..... SMITH *mn*

COUNTRY CODE..... US
COUNTRY NAME: UNITED STATES

STATE CODE..... OR
STATE NAME: OREGON

COUNTY..... CURRY
DRAINAGE AREA..... 17100~~3~~10 PACIFIC NORTHWEST
PHYSIOGRAPHIC PROV..... 13 KLAMATH MOUNTAINS
LAND CLASSIFICATION..... 01

QUAD SCALE QUAD NO OR NAME
1: 62500 GOLD BEACH

LATITUDE LONGITUDE
42-24-21N 124-23-05W

UTM NORTHING UTM EASTING UTM ZONE NO
4695550.0 386050.0 +10

TWP..... 37S
RANGE..... 14W
SECTION.. 05
MERIDIAN. W.M.

COMMODITY INFORMATION

COMMODITIES PRESENT..... MN

OCCURRENCE(S) OR POTENTIAL PRODUCT(S):
POTENTIAL.....
OCCURRENCE..... MN

ORE MATERIALS (MINERALS, ROCKS, ETC.):

EXPLORATION AND DEVELOPMENT
STATUS OF EXPLOR. OR DEV. 2

DESCRIPTION OF DEPOSIT
FORM/SHAPE OF DEPOSIT: LENS

SIZE/DIRECTIONAL DATA

SIZE OF DEPOSIT..... SMALL
DEPTH TO BOTTOM..... 25 FT.
MAX LENGTH..... 40 FT.

COMMENTS(DESCRIPTION OF DEPOSIT):
2 CHERT LENS

PRODUCTION
NO PRODUCTION

ANNUAL PRODUCTION (ORE, COMMOD., CONC., OVERBURD.)

GEOLOGY AND MINERALOGY

AGE OF HOST ROCKS..... JUR
HOST ROCK TYPES..... CHERT

IMPORTANT ORE CONTROL/LOCUS.. RED CHERT LAYERS ARE MOST IMPORTANT

GEOLOGICAL DESCRIPTIVE NOTES. CHERT LENSES ARE IN SANDSTONE & INTERBEDDED SHALE

LOCAL GEOLOGY

NAMES/AGE OF FORMATIONS, UNITS, OR ROCK TYPES

- 1) NAME: DOTHAN
AGE: JUR

GENERAL REFERENCES

- 1) RAMP, L. AND OTHERS, 1977, GEOLOGY, MINERAL RESOURCES AND ROCK MATERIAL OF CURRY COUNTY, OREGON; ODGMI BULL. 9 P. 46
- 2) APPLING, R.N., 1958, MANGANESE DEPOSITS OF SOUTHWESTERN OREGON; USBM REPT. INV. 5369, P. 13