



## STATE OF OREGON

## INTEROFFICE MEMO

TO: MINE FILES

DATE: 12/16/86

FROM: Howard C. Brooks

SUBJECT: Red Butte prospect (Malheur County, Secs. 34 and 35, T.25S., R.43E., Diamond Butte 7½ minute quadrangle).

Mark Ferns and I visited the property on 11-21-86 with Joe Levay and Mike Houseman of Manville Corp. We walked about three miles to and from the prospect. An old road extending to the northeast base of the Butte about one-half mile from the prospect has been closed by the BLM reportedly to protect the wildlife and scenic values of the area which is part of the Dry Creek Buttes wilderness study area. Prior to formation of the WSA (late 1970's) the Red Butte area was closed to motor vehicles to preserve wildlife habitat.

In the spring of 1985 the BLM recommended the area for non wilderness designation and has withdrawn wilderness study funding. USGS people did some mapping in the area prior to funding withdrawal.

The high mineral potential of the Red Butte area is known to BLM personnel in the Vale district including District Manager Ralph Heft and Geologist Bill Holsheimer because of the DOGAMI sampling study released in 1983 and subsequent prospecting by Manville and partners. Whether the BLM made any attempt to evaluate the mineral potential prior the habitat withdrawal in the 1970's I don't know. Claims were located in the area as early as the 1950's or early 1960's for mercury. There are a few very small hand-dug prospect pits scattered around. Levay says that air photos taken in the 1960's show the road that is now closed.

Manville located the prospect in early 1983 following the DOGAMI report. They had sampled the area in 1981 but found no significant gold values. Tenneco joint ventured with Manville and did some surface sampling in 1984 (?) - 1985; results were poor and they dropped out. Manville continued surface sampling and in 1986 found a zone containing impressive gold values and potentially large tonnage. A new joint-venture partner has signed but wants to remain unknown to the public at this time.

Levay told us the new agreement calls for 4000 to 6000 feet of drilling and they have asked the BLM for permission to use the road. They would use helicopter to move the drill around but want to truck drill water to the end of the existing road then pump it in one-inch steel pipe the remaining half-mile to the drill sites, a lift of about 400 feet. Permission to use the road was denied by Heft based on his concerns for potential wildlife disruption. This decision has been appealed by Manville attorneys. Without the road water would have to be pumped a minimum of 3 miles utilizing 3 or 4 lift stations; cost of water for the program would be \$60,000 to \$80,000. Water cost utilizing the road and one stage pumping would be about \$25,000.

Red Butte Cont.

Levay told us that Red Butte is the best exposed example of a paleo-hot spring system he has seen in the western U.S. All parts are visible, including siliceous sinter containing plant casts, a broad acid-leach zone and widespread and intense silicification. Gold occurs in a zone of multistage hydrothermal brecciation and silicification. The country rocks are Miocene sediments.

Mike Cummings has told us he is much impressed with the mineral potential of the area and the hot spring manifestations. A graduate student of his, Susan Evans, completed a Masters Thesis on the area last spring.