MR-43-20

MEMORANDUM ON DRY CREEK SCHEELITE DEPOSIT T. 40 N., R. 93 W.

Fremont County, Wyoming.

Location of the deposit:- One June 20 and 22, 1943 a scheelite deposit on the summit of the east canyon wall of Dry Creek, north of the Fuller Ranch, and approximately east of a fork of the creek in Twp. 40 N., R. 93 W. was examined.

Geology of the deposit:- The main country rock is a sequence of schists and gneisses which strike N 55 degrees E. This series is cut by pegmatites and lenses of bull quartz; the pegmatite cutting across the structure and the bull quartz cutting both across structure and following it in places. The youngest rock comprises black metadiorite(?) dikes which apparently cut all the older rocks.

Scheelite was noted to occur in the bull quartz in three old prospect pits and again in a lense which follows the foliation of the older schists. The scheelite occurs as specks and pods and is not evenly distributed through the quartz. Just south of the quartz lenses, about 50 feet, scheelite occurs in a highly altered greenish rock in the schist-gneiss sequence. This lead can be traced southwestward for about 1,000 feet, but is not exposed continuously throughout that distance because of a cover of soil which bears a heavy growth of sagebrush. At one point two distinct leads of scheelite were found along the general strike, and at another scheelite was noted in a black metadiorite (?). The lead could not be distinguished southwest of that point.

There is another scheelite showing on the east side of the canyond of Dry Creek, and only several hundred yards from the stream, along a conspicious rock ledge. Several large pods of scheelite lie in a gneissic rock on the north margin of the ledge.

Field Work:- The area about the quartz lenses was examined both in the daylight and in the dark, but the scheelite lead southwest of there was examined only after dark with an ultra-violet lamp. Small flags were tied at intervals along the scheelite showing and from the southwesternmost point where scheelite was found a bearing line was run S. 55 degrees W. by backsighting on a flashlight at night. The point at which this bearing line intersects the road along Dry Creek was marked by a flag.

The scheelite showing north of this point and not far from Dry Creek on the east wall of the canyon was examined with a lamp only enough to learn that scheelite occurs there.

Further prospecting:- It is suggested that the good exposures of rock part way up the east canyon wall, which are on line with the scheelite lead further east, be examined with an ultra-violet lamp. Because of the possibility of a change in the trend of the lead, or because of inaccuracies in surveying the bearing line, the exposure should be looked for a considerable distance on either side of the point where the line crosses the outcrops.

Further exploration:- Because of poor exposures of the scheelite lead near the quartz lenses it is impossible to determine the width or length of the lead. In several places near the quartz lenses the ore is of good quality and compares favorably with the surface showings of other deposits which are now being mined. Exposures southwest of the quartz lenses show a smaller amount of scheelite, but because of the limited width of the exposed ledges it is possible that the 2 or 3 feet exposed lie on one of the margins of the vein.

The only manner of actually determining the worth of the deposit would be to trench across it in places to determine width, length and general quality of the ore. It would seem inadvisable to sink a shaft on the richer part of the lead without knowing something more about the length of the deposit.

If scheelite could be found nearer to Dry Creek, along the lead, as utlined previously, such a deposit would lie in a much more accessible place and could likely be worked with advantage compared to the deposit known to exist near the top of the stream divide east of Dry Creek.

Horace D. Thomas

June 27, 1943