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DISASTER DISTRICT

LOCATION

The Disaster district is located on the northeast and east sides of the Kings River Valley in the Montana Mountains (Trout Creek Mountains of Willden, but incorrectly named). The district starts, or ends, at the Nevada-Oregon border and runs south down the range front for 10 to 15 miles. For the purposes of this report however, it's going to include all the area on the east side of the Montana Mountains south to the Thacker Pass road. All the mines and prospects can be located on the Disaster Peak and Thacker Pass 15 minute topographic maps.

HISTORY

Very little information is available in the way of recorded history on this district. It is known that small amounts of gold, silver, mercury, and uranium have been produced. Most of the mineralization is in the form of lode occurrences but there are also two placer gold occurrences. Vanderburg reports that work on the placer deposits was being done in the district as early as the late 1870's. Historically the area has received very little attention from explorationists until the mid to late 1970's when uranium was an attractive commodity to look for. During this time period the entire area, as far east as McDermitt and south to State Route 140, was staked, and explored for uranium. Several areas within the district have drill indicated reserves of uranium as a result of this work. However, individual deposits are small and low-grade, being on the order of 5 lb per ton U_3O_8 . Current activity is restricted to gold exploration by Placer Ltd. in the Ikes Canyon area and to lithium and clay exploration by Huber Corp. in the Big Bend Spring area. It is not known what the total production has been from the district. It is known that about 500 tons of uranium ore has been produced; that a few ounces of gold and silver have been produced; and that a very few flasks of mercury may have been produced.

GEOLOGIC SETTING

Most of the range is underlain by rhyolitic to dacitic flows and welded tuffs, but large areas of granodiorite and related intrusive rocks occur in the northwestern part of the range. The intrusive rocks are overlain by coarsely porphyritic basalt and unmapped thin sedimentary units near the border and extending into Oregon. The intrusive rocks are mainly granodiorite but their composition varies considerably, mostly in the amount of included dark minerals. Alaskite is locally intrusive into the granodiorite near Flat Creek. Flow units are exposed on the north side of Thacker Pass, and the zone of flow units persists for a considerable distance to the north, at least as far as Horse Creek.

The important structural features are some persistent normal faults along the west front and in the northwestern part of the range. These faults offset all the rocks of the range. The oldest is considered to be the Moonlight fault. This is an east-dipping normal fault that has a

displacement in excess of 2,000 feet. The China Creek fault is another prominent fault. It is a west-dipping normal fault and it is thought by Willden that this fault, together with other concealed faults to the west are probably responsible for the topographic expression of the range.

ORE DEPOSITS

There are a variety of mineral occurrences throughout the district but the Moonlight uranium mine has been, and still is, the largest dollar producer. According to Garside, uranium mineralization occurs in a silicified breccia zone in the hanging wall of a north-trending fault which displaces Tertiary rhyolitic ash-flow tuffs. These rhyolitic rocks overlie a Jurassic(?) quartz monzonite or granodiorite, which is present at depth in some of the workings. The mineralized fault dips from 45° to 54° E near the surface, but steepens at depth as observed in an inclined shaft.

Uranium minerals include autunite, torbernite, and gummite. These are associated with pyrite, iron oxides, clays, quartz, and dark purple fluorite. Autunite is reported to be more common near the surface and it has been proposed that uraninite may be present at depth. It is thought that production has been about 500 tons of uranium ore, assaying between 0.07 to 0.22 percent U_3O_8 . It is also thought that no profit resulted from the processing of this ore(?).

The most extensive workings in the district are found in Ikes Canyon. On the topo map these workings are called the Iron King Mine. No mention of this mine can be found in the literature. There are about three sets of workings in the canyon consisting of adits and shafts. They are thought to pre-date World War II, and collectively amount to a few hundred feet. Newer work, done within the last 2-4 years consists of a series of drill roads laid out up the sides of the canyon, along with numerous sites that have been drilled. This work was done when the uranium boom was going. Geology around the workings consists of a host rock(s) that are a mixture of rhyolite-andesite and a very dark colored granodiorite-diorite intrusive. Fairly narrow, gray quartz veins cuts these rocks and in some of the vein material considerable pyrite was observed. Placer Ltd. had just taken a lease on this property at the time of visitation. They are looking for gold. Willden states that between these workings and those in Horse Canyon to the south that recorded production has amounted to 1 ounce of silver and 4 ounces of gold.

No work has been done on the placers located in Horse Creek and China Creek for many years. According to Vanderburg, activity here dates back to the 1870's and in 1935 there were too men working a sluicing operation on China Creek. The operation was, in part, handicapped by lack of water. This is the last known activity on the placers. No production has ever been recorded from those workings but it's fairly obvious that there has been some, although probably not much.

The Disaster Peak mercury prospect, currently named Apollo, is located approximately 1.5 miles southeast of Disaster Peak, on the east ridge top of China Creek. Bailey and Phoenix state that the property was originally developed in 1940 and 1941. In 1942 development consisted of a northeasterly trending 95-foot adit and a second 32-foot adit lying about 25 feet above. At the time of the current visitation these adits, or sites thereof, could not be found. What was observed was a series of E-W

trending cuts and trenches spread out over about 1/8 to 1/4 mile. There were about 7-10 of these cuts. Geology consists of a mixture of volcanic rocks of basically andesitic composition but containing much glassy material and a fair amount of rhyolitic material. Opaline silica coats fractures in these rocks and the cinnabar, what little was seen, is associated with this opaline silica. There has been no activity here for some time. There has been no recorded production from the property but it appears that a few flasks of mercury have been produced, less than 10(?).

SELECTED REFERENCES

- Bailey, E. H., and Phoenix, D. A. (1944) Quicksilver deposits in Nevada: NBMG Bull. 41, p. 100.
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- Willden, R. (1964) Geology and mineral deposits of Humboldt County, Nevada: NBMG Bull. 59, 154 p.