

Excerpt from E. Callaghan's letter of August 4 to
Mr. Hewett, summarizing observations at Gregg's Ferry.

We had an uneventful sail up the lake, which was then at stage 1173, only 59 feet below the top of the dam and 25 feet or so below the spillways. It is simply astounding that such an enormous body of water should have been created by the tiny-looking Colorado in such a short time. We sailed up 65 miles in about 5 hours to the former site of Gregg's Ferry. Here there is a scow tied up for hauling ore from the Lake Shore mine to the Boulder City landing. Julihn, Kelley, and I were met at the landing by Fred Gibson of the Lake Shore Mining Co., who hauled us up to his camp about 6 miles distant and 1400 feet higher. The three of us went over the surface before dinner, and after dinner went underground. The next morning Congressman Scrugham, Buehler, and Hunt came up. They went with prospector Jess Mellon to his Jumbo claim. Scrugham had Julihn cut some samples at the Lake Shore. We finally caught up with the Congressman and I reported my conclusions to him. He seemed quite satisfied, and I decided that we did not need to stay several days, but could go back that noon. Six of us not including the Congressman went to the old Eureka mine, and then hurried back to the boat. Baggage was gathered up, and we set out on the return journey shortly after noon. It was hot by this time (106°), but we stopped at the east end of Virgin Canyon to see a prospect that Segerstrom and Heizer had. We then had lunch and started down the canyon. By this time a black cloud had gathered, and a squall struck with extraordinary fury. We got soaked before we could get into the cabin. The rain splashed in torrents off the cliffs. Waves about 3 feet high were stirred up, and we had a rough trip all the way to Boulder Canyon. It was as good a storm display as one would care to see.

On the way back the Congressman arranged with Ruckstall to send us up in the seaplane he had just gotten, so we were Mr. Ruckstall's guests at the Boulder Hotel that night, and at 8 a.m. started out on a two-hour seaplane flight that took us over the area and as far as Pierces Ferry. We were accompanied by Segerstrom and Heizer on the flight. On our return we conferred with Schenk, the Park geologist, and returned to Las Vegas for the night. We returned to Marysville the next day, July 27, by way of Caliente and Modena.

The portion of the Gold Butte District that we saw lies east of Bonelli Peak. It is in the rugged area of Precambrian gneiss and schist which are here intruded by a body of biotite granite. The granite is in irregular contact with the older rocks and plates of gneiss and schist are included in the granite. At the Lake Shore the schist plate, about 30 feet thick, strikes between N 50 and 75° W. It dips about 6° to the northeast. The granite has been broken on many planes, as the pegmatite and aplite dikes are offset in many places. In the schist are lenses and irregular masses of quartz that contain or contained pyrite, and Gibson says that the pyrite or the iron oxide near the surface are indicators of the gold. Assays are highly variable. The A.S.&R. did considerable work to try to develop a large tonnage property, but finally gave up their lease and bond. These plates were called "dikes" by Gibson and others. There are also postmineral shear planes, one of which is very smooth and forms the roof at the Lake Shore. Conditions are similar at the Jumbo of Jess Mellon to the southwest. Here the trend of the outcrop is about N 45° W, and ~~has~~ the dip to the northeast. At the old Eureka, where

considerable stoping has been done, the conditions are different. A shear zone dipping 65° NE strikes N 20° W, and has been prospected for less than 200 feet. It is wholly in the granite, no schist, and consists of sheared granite with lenses of quartz with specular hematite. At the Heizer-Segerstrom prospect there is quartz with scattered crystals of galena in a pegmatite lens in gneiss.

That is essentially the geological situation that I presented to Congressman Scrugham. Everything is nearly perfectly exposed in rugged though not exceedingly high hills. The schist zones are easily traced by the prospectors, and exposed faces can be assayed. There is little that geology could do but to show the distribution of these zones. The map would be of value but there is little to say in the report. Topography as well as geology should be done. The area would be about 6 miles long and 4 miles wide. Two weeks should yield a planetable map of the area and sufficient geologic information. A 31680 scale should be adequate.