

Report,
July, 1910.

Albuquerque, N. M., August 9, 1910.

Mr. W. H. Code, Chief Engineer,
522 Bumiller Building,
Los Angeles, Cal.
Dear Sir:

I herewith submit my report for the month of July 1910.

PERSONAL MOVEMENTS.

From the 1st to the 20th of the month I was in the office getting out monthly and annual reports etc., and on the 21st and 22d I made a trip to Santa Fe and thence, in company with Superintendent Crandall, to San Ildefonso. From the 23d to 26th was in the office. Left on the evening of the 26th for the north and went direct to the Hogback Camp, leaving there on the 31st.

PUEBLOS.

In response to a request from Superintendent Crandall, I visited San Ildefonso during the month, and found that the river had changed its channel, and was now running on the west side of the river bed. Owing to the needs of the poor Indians of this Pueblo, it was decided that it might be possible to now secure water for them for irrigation. It was necessary to make some surveys, and as I had no engineer available I employed one, who made the surveys and a report which I have already forwarded for your consideration. It is estimated that with the volunteer work offered, it will cost about \$2000 to give them water. The only point being that the work will be temporary in character, although it will be as permanent in character as the majority of the small ditches in the flood streams of the southwest. The cost

work went very slowly. Not having any engineer in charge, I had directed the foreman to run along with a light crew on the rock work of the head section. The Indians were busy with their crops; and having many dances, and it was very hot, and it seemed impossible to secure men to work. The last week, however, more men came in for work, and the conditions are now improved, for the weather is cooler, the crops are where they can be left and Mr. Shelton put a stop to the dances. I have now directed Mr. Burnham to put on all the men he can get and has tools for, and directed him in detail what work to do.

The new engineer, Mr. Churchill, has been appointed, and I hope will report for duty by the middle of August.

UNDER GROUND WATER DEVELOPMENT.

Since crossing the river and beginning work in the Oraibi Wash, Hallstrom has been having nothing but trouble. While we expected to secure water at almost any point in this wash, he has sunk holes at various places and to varying depths, and all of them have proven dry. We have located the points, as nearly as possible, where Professor Gregory found water by boring, but have found no water and often not a trace of moisture. 270 feet of test holes were sunk during the month without result.

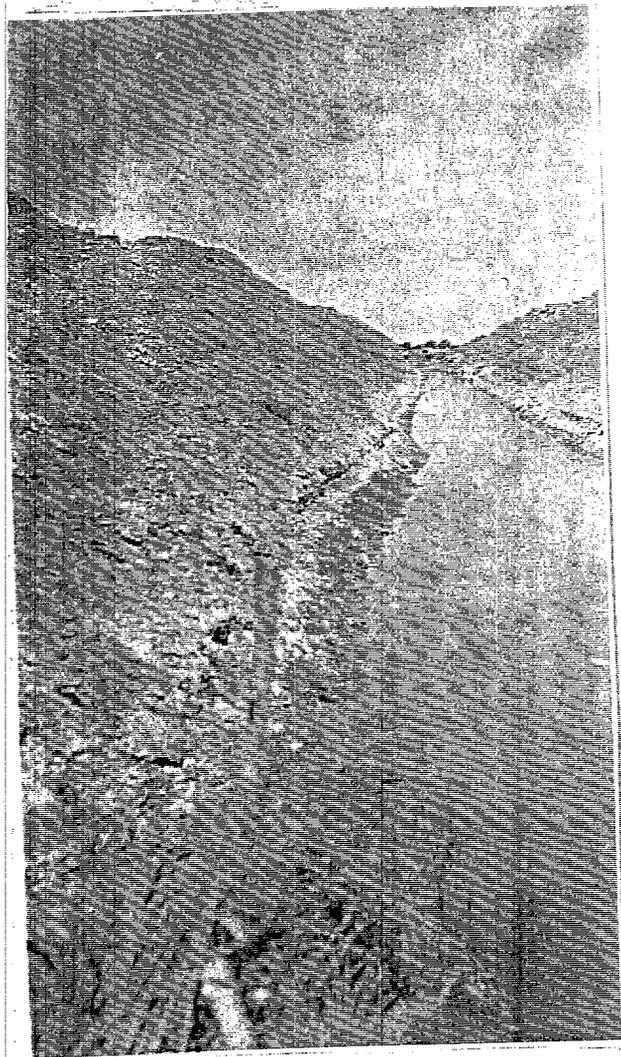
He has proceeded further up the valley, and is again trying for water. I have sent you some of his reports during the month in which he gave details of his drillings.

ZUNI IRRIGATION PROJECT.

Rains began at Zuni about the 23d, and since that date it has not been necessary to run much water in the ditches. On that date the valves in the tower were opened

Aug 1910(?)

Tab. 1.



Lower end of
ditch
below the strata
of quicksand.

Showing strata
of quicksand in
ditch, and method
of brush revet-
ment.

