File General Navajo

Commr.
CNM

5-1143

UNITED STATES
DEPARTMENT OF THE INTERIOR
INDIAN IRRIGATION SERVICE
SUPERVISING ENGINEER
District No. 5
Albuquerque, New Mexico

AIR MAIL

File Navajo

File 9054-A 4/28

January 2, 1934

JAN 4 - 1934 651 RECEIVED

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Commissioner of Indian Affairs
Washington, D. C.

Dear Sir:

Reference is made to Office telegram of December 19, 1933, quoted as follows:

Written by Commissioner

"Investigate possibility procuring abundant water supply at locations near to and north of railroad east of Chambers and within a mile or two west of the Arizona, New Mexico line. Likewise investigate for abundant supply Mexican Springs and environs."

There is enclosed a report by General Foreman A. H. Womack, relative to the matter of water development at points mentioned in the telegram. It is noted that the Santa Fe railroad has been able to develop water, by sinking open wells, to capacities of 275 and 300 gallons a minute at Houck and Chambers, respectively. This quantity of water would, undoubtedly, be adequate for any domestic, plant, or institutional uses of the Indian Service. The cost of development may be anywhere from ten to fifteen thousand dollars, depending on the conditions and use to which the water might be placed.

It is also noted that there is a possibility of developing water by well drilling. However, as noted in Mr. Womack's report, there is an uncertainty as to the quantity of water which might be developed, as this is an unproved area. In view of the wells developed by the Santa Fe railroad, it is recommended that the open type of concrete caisson be used if some institutions are to be placed in that area.

As to the matter of an adequate supply in the Mexican Springs area, quantities noted in Mr. Womack's report would be inadequate for a large institution; however, it is likely that considerably more water may be developed.

An additional supply could also be obtained by well drilling, which may or may not in itself be sufficient for a large institution. It would be necessary to drill some 1,500 to 2,000 feet, and for such a supply, which might possibly be an Artesian flow, a well would probably cost about fifteen to twenty thousand dollars, including pumping machinery, if such

is necessary. Should the development work now being carried on show an insufficient supply, the addition of a deep well would, undoubtedly, give sufficient water, so that the two developments would prove adequate.

Very truly yours,

H. C. Neuffer

H. C. NEUFFER,
Supervising Engineer.

Enc. 1

CC--A. L. Wathen, Director
H. V. Clotts, Assistant Director
A. H. Womack, General Foreman

Domestic use - say 60 gal. per day

$100 \text{ GPM} = 6000 \text{ GPH} = \frac{144\,000}{60} \text{ GPD} = 2,400$

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