Little Colo. Riv.

Navajo Extension

DEPARTMENT OF THE INTERIOR

UNITED STATES INDIAN IRRIGATION SERVICE

SUPERINTENDENT OF IRRIGATION

Albuquerque, N. M., March 31, 1915.

Mr. W. M. Reed,

Chief Engineer,

Washington, D. C.

Dear Sir:

I have received the authority transferred from Mr. Coultis for the drilling of certain wells in the Navajo Extension along the Little Colorado. I have also had a letter from Mr. Schanck regarding the work, and one letter from Layne & Bowler of Los Angeles, whose system of well drilling and screening it was proposed to use in this work. I wish a little more definite instruction in the matter before I take further action.

As I understand the matter, it is proposed to drill a series of wells at various points along the Little Colorado river, beginning perhaps at the east Reservation line, and extending down the river as far as we find sufficient lands that may be irrigated to justify, providing the earlier wells developed prove a success. That the first wells are to be scattered along in the nature of an exploration, and then later, if they prove a success, to secure further funds and put down the necessary number of wells at each point to furnish water for the area that may be put under irrigation. That in a general way it is thought probable that a steam plant will be placed at some point along the railroad, power generated, and the power transmitted to the differend plants for pumping.

I understand further that the idea is to put down the wells according to the Layne & Bowler system, which consists of sinking the well with a rotary rig and putting in the multistage pumps that fit inside of the casing, and that the principal part of the system is their method of constructing wire wound screens, which in all cases is made to fit the particular conditions existing at each well, and at the varying depths in which water is encountered.

Messrs. Layne & Bowler have stated that they can furnish the rig F. O. B. Casa Grande, Arizona, with steam power, or if we desire to substitute gas engine for power, the latter would be F. O. B. Los Angeles, and that they would want $300.00 per month for rental on the machine, and that the driller they would furnish would want $6.00 a day and expenses.

Will you please advise me as soon as possible whether my understanding of the matter as set forth above is correct, and whether you think that the price set for the rental of the rig is justifiable, based on the value of the equipment?

If this particular system of drilling and screening is desired, it would probably be advisable for me to go to Los Angeles, make arrangements and enter into an agreement with Layne & Bowler regarding the work. It is now so late in the season that prompt action will be necessary in order to have any work done before the end of the fiscal year.

I would further ask you to advise me whether it is desired that any equipment be purchased for these wells, or simply after

testing a well, cap it and leave it pending such time as we should determine on the number of wells, the feasibility of the transmission of power, etc.

I would like to be fully advised in the entire matter, that I may make no error in prosecuting this work.

Very truly,

H F Robinson

Superintendent of Irrigation.

HFR:CAS