

August 7, 1916

Requesting approval
in change in size of
wells drilled.

5-1148

8-12-16

*This was approved
& copy returned
to H. Robinson
with*

DEPARTMENT OF THE INTERIOR
UNITED STATES INDIAN IRRIGATION SERVICE
SUPERINTENDENT OF IRRIGATION

Navajo

En-route Farmington Branch,
August 7, 1916.

Mr. W. M. Reed, Chief Engineer,
WASHINGTON.

Dear Sir:

The wells drilled by the rigs on the Navajo and Hopi reservations have heretofore used as a standard size 3 1/2" casing. In this country of little water, and where we usually find the water of the shallow wells in fine material we have great difficulty in developing wells because we do not develop sufficient water. We have on several occasions used a larger casing, and find that by using the 5 5/8" we can often develop a well where it is impossible with the smaller size. This has been demonstrated in a number of cases, and I have decided that on account of the slow movement of the water an insufficient quantity flows into the well through the perforations of the small casing, but where the larger casing is used, the additional area of the openings will allow a sufficient quantity of water to enter the well, and the result seems to justify the additional cost.

There is no additional cost to the drilling of the larger hole, excepting the working of a little heavier string of tools and the small additional amount of material it is necessary to sandpump out. The additional cost of this is negligible.

After going over the matter with the drillers, it has been decided that we can make better wells and if we can develop one well with the larger size, when with the small size it would have

*RG 75, B1A, Irriq. Div
Gen. Corres, 1901-31
Dist 5, Box 107
Hopi - Navajo 1916*

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to be abandoned, the saving at this one place would pay the additional cost of making a large number of the wells of the larger size.

I wish to make the change, and as fast as the small casing on hand is used to put in a stock of the larger casing, and use only the larger in the future.

To do this, there will have to be a small amount of new equipment bought, a larger string of tools for each rig and a few extra tools, such as stock and dies for threading the larger size of casing, etc. The full list has not been made up for each rig yet, but the cost will not be great for the new equipment.

It is thought that the change will make better wells at practically all points and in the long run will not increase the cost of the good developed wells as it will cut down the number of failures where a well is abandoned because the amount of water developed is too small.

This change is recommended by all of the drillers and by Foreman Womack.

Your approval of the change is requested.

Very truly,

H. Robinson

Superintendent of Irrigation.

Aug 12 1916

I approve this change in size of the wells. However where an area is known to be such as to furnish an adequate supply with the use of the small well casing - any casing now on hand may be used.

W. Womack
Chief Engineer.