

IOWA
STATE DEPARTMENT OF HEALTH
DIVISION OF PUBLIC HEALTH ENGINEERING
DES MOINES

Place Lost Nation, Iowa

Date March 11, 1964

Report on New Well Construction

By Galen Drennan

Approved

Director

Date of report

Division of Public Health Engineering

M E M O

On a recent bacteriological report collected by local officials at Lost Nation was a notation that the sample was collected from a "new well". On this date, the writer visited Lost Nation to see if a new well had been drilled for the public water supply system.

A new well has been drilled approximately 8 ft. north of the Town Hall. It is 85 ft. north and east of sanitary sewers in Boutelle St. and Main St., respectively. It is approximately 25 ft. from a cast iron sewer in the Town Hall. An empty gasoline storage tank is buried approximately 75 ft. southwest of the well. The tank will not be used in the future. The site is elevated and not subject to flooding. In view of the above information, it is apparent that the site was approvable, although this office was not contacted prior to construction.

Everett Schroeder, Water Superintendent, furnished the following information on the construction of the well.

Date Drilled:	Summer, 1963
Test Pumped:	October 19, 1963
Driller:	George Lingle, Preston, Iowa
Total Depth:	185 ft.
Casing:	10" steel casing - 0-30'
	8" steel casing - 0-135'

Drive shoe into rock on bottom of 8" casing.
Cement grout was poured around the 8" casing.
Total depth that grout penetrated is unknown,
but was assumed to be at least 50'.

Log of well:	Top soil 0-25'
	Quick sand 25-30'
	Sand 30'-132'
	Rock 132'-185'

Drill cuttings were kept and forwarded to I.G.S.

Pump:	20 Hp. Red Jacket submersible pump rated at 200 gpm @ 60 psi.
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Pump Setting:	126 ft.
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Static Water Level:	32'6"
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Pumping Level:	Approximately 100 ft. @ 300 gpm.
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This information indicates that the well is probably constructed satisfactorily for a public water supply well; however, the cement grouting method is questionable. It was noticed that the top of the well was not properly sealed. Mr. Schroeder was advised of this, and the writer plans to notify Town Officials by letter of this defect.

No complete mineral sample was collected during the pump test. The last complete mineral analysis on well #1 was collected on October 20, 1959. It seems advisable to request a complete mineral analysis on both wells.

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