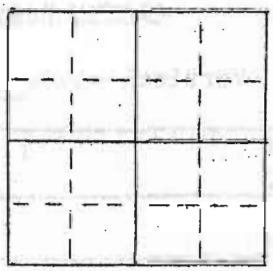
W-3668

IOWA GEOLOGICAL SURVEY
In Cooperation with U. S. Geological Survey

RECORD OF WELL



Location:

Town: Waverly (N E / S W): County Bremer E.

NE SE NW sec. 3 T 91 N., R. 13 W. Twp.

Well name and number City Well #3 (at west water tower)

Owner City of Waverly Address Waverly

Tenant _____ Address _____

Contractor Layne-Western Address Ames

Drillers Dave Laird

Drilling dates April 1949

Well data:
Elevations: Drilling curb _____ feet; Land surface 938' feet

Determined by _____

Topographic position Upland

Total depth: Reported 160 feet, Measured _____ feet

Drilling method Cable tools

Hole and casing data 12" casing 0-65 ft. (cemented)
12" open hole 65-160 ft.

Original depth to water 42'5" ft. ~~a.burn~~ below L.S. Date 4/15/49

Original elevation of water level _____ ft.; Source of data _____

Sources of water: Principal Silurian-Dev.; Others _____

Production data: Date 4/15-16/49

Static depth to water 42'5" Measuring point

Pumping level 56'8" at 776 g.p.m. } driller
59'2" 847

Specific capacity ____ g.p.m. per ft. drawdown; Temperature ____ °F.

Pump data: Type pump ____ Column Dia. ____ Length ____
Cylinder or bowls: Dia. ____ Length ____ Suction pipe ____

Power ____ Airline ____

Estimated rate of production: ____ g.p.m. for ____ hrs. a day

Use of water ____

WATER ANALYSES (in parts per million)

Date samples				
Sampled by				
Total solids				
Insoluble matter				
Alkalinity (Meo)				
Alkalinity (Phn)				
pH				
Fe_2O_3+ Mn_2O_3 +Al_2O_3				
Alkali as sodium				
Calcium				
Magnesium				
Iron (unfiltered)				
Manganese				
Nitrate				
Fluoride				
Chloride				
Sulfate				
Bicarbonate				
Hardness (ppm)				
Hardness (gpg)				

Remarks ____

Laboratory data: Sample storage location CE10-5

Sample range 0-160 No. spls. 24 No. dupls. & cond. 24 Fair

Spls. prepared by JCC Washed range 35-160 by WMM

Driller's log and cond. ____

Insoluble residues: Prepared by ____ Studied by ____ Strip log ____

Microscopic study Heavy strip log Sept 1, 1949

Gen. log ____ Correl. by ____

April 18, 1949 Waverly, Iowa

The final drilling on the New Well at the West Water Tower was completed Wednesday, April 13th. A test pump was installed and the Well was tested for producing water Friday and Saturday April 15th & 16th. The maximum water pumped at any time during the test was nearly 1000 g.p.m.. The Water pumped was as follows:

	Time	Water Level	G.P.M.	Draw Down	Gauge Reading	Remarks
Apr. 15	2:30 PM	42'5"				Started Pumping
	2:40 PM	59'5"	590	7'00"		Very dirty clay-Lime
	3:10 PM	59'11"	703	17'06"		Very dirty clay-Lime
	3:55 PM	58'8"	760	16'03"		Pump stopped 5 min & started again water clear
	4:10 PM	59'6"	890	17'01"		Water dirty
Apr 16	8:00 AM	42'06"				
	8:30 AM	56'08"	776	14'02"	39.5"	Water Cloudy
	9:00 AM	" "	"	" "	"	Some Clearer
	9:30 AM	" "	"	" "	"	" "
	10:00 AM	" "	"	" "	"	" "
	10:30 AM	" "	"	" "	"	Fairly Clear
	11:00 AM	" "	"	" "	"	" "
	11:30 AM	" "	"	" "	"	" "
	12:00 noon	" "	"	" "	"	" "
	12:30 PM	" "	"	" "	"	" "
	1:00 PM	" "	"	" "	"	" "
	1:30 PM	" "	"	" "	"	Clear
	2:00 PM	" "	"	" "	"	"
	2:30 PM	" "	"	" "	"	"
	3:00 PM	" "	"	" "	"	"
	3:30 PM	" "	"	" "	"	"
	3:30 PM	59'02"	847	16'08"	47"	"
	3:45 PM	" "	"	" "	"	"
	4:00 PM	" "	"	" "	"	"

The Well has a 12" casing cemented in with neat cement to a depth of 65 feet. The full depth of the Well is a 12" hole 160 ft., which is just in the Blue rock or Maquaketa Shale.

Bill Gerberding, Engr., Carnation Co, Waverly