

## STRATA RECORD Kelley WELL

Black soil-----	1 to 5'
Yellow clay -----	5' " 30'
Blue clay -----	30' " 55'
Yellow clay -----	55' " 95'
Blue clay -----	95' " 195'
Sand, medium fine, brownish-gray	195' " 205'
Sand, slightly coarser than above, gray	205' " 216'
Blue clay-----	216' " 218'

## WELL DATA

Feet of 8" pipe driven in well 216' just thru sand.  
 Feet in clay below sand (2) two.  
 Two feet below casing filled and tamped with gravel & rock.  
 Length of cut screen thirteen (13) feet.  
 Bottom of screen set at point 216' below the curb.  
 Extension of length of with 5' 6" with 6" pipe with  
 packer on top of pipe makes over-all length of the  
 WELL SCREEN 18' 6".  
 Pipe was pulled back over screen fourteen feet.  
 Packer SECURELY SEALED.

## WELL TEST.

Well was tested on July 25 and 26 for a pumping  
 period of approximately eight hours. At close of test  
 water showed no appreciable draw-down.  
 Size of cyl. used in well 5 1/2", drop pipe 126' of 6".  
 Length of pump stroke 36"  
 Approximate output per minute 100 gallons.

DEPTH from Curb to water 81 feet.

## NOTICE \* WARNING

To all persons handling equipment to place in this well  
 it should ALWAYS be KEPT in MIND that anything dropped  
 into the SCREEN in this well may damage or even ruin it,  
 there-fore this duty should be performed only by men  
 with experience and safe equipment.

Kelly, Iowa  
June 19, 1939

Depth ----- 225 feet  
Geological Formation ----- Pennsylvanian  
Des Moines Series  
Mr. R. W. Brooks  
Layne-Western Company  
807 World-Herald Building ----- 540  
Omaha, Nebraska  
Insoluble Matter ----- 18.8  
Dear Mr. Brooks:  
NO<sub>3</sub> ----- 0.0  
Subject: Kelly, Iowa  
Na ----- 63.4  
Ca The present well at Kelly, Iowa, has a reported depth  
of 225 feet. The driller's log is as follows:  
Mg ----- 33.1  
Fe Drift and yellow clay 40 feet  
Sand (very little water) 10 "  
Clay, yellow 60 "  
Mn Clay, blue 40 "  
Sand, to 222 "  
Al 6" hole, 8' strainer in bottom. 1.9

P From the above log, I infer that the top 150 feet is  
glacial drift material of the normal type. However,  
Cl between 150 and 222 feet the top of the Pennsylvanian  
system should be reached and it is my interpretation  
SO<sub>4</sub> that the well is finished in a Pennsylvanian sandstone.

HCO<sub>3</sub> According to records in our files, the present well  
produced 50 g. p. m. for the duration of a ten-hour  
PO<sub>4</sub> pumping test. We have no record of the water level or  
drawdown. The attached sheet shows the mineralogical  
SO<sub>3</sub> character of the water from the Kelly well.

Calc If you do any drilling at Kelly, we will appreciate it  
greatly if you will save samples and record a log for  
the Geological Survey.

Very truly yours,

HGH:LM

H. G. Hershey



IOWA GEOLOGICAL SURVEY  
Water Well Data Sheet

Survey Number **W-0199**

Town Kelley County Story T.      N., R.      W.     

Name Town Well Location NE NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  Sec.     

Contractor E.A. Ford, Marshalltown Driller      Use     

Construction      Drilling Dates - July 1939 Drilling Depth     

Topog.      Elev. 1032 Ref.      Total Depth     

Final      above     

Static      below Pumping      Draw      Time     

Level      curb Level      down      gpm      pumped      Date     

Depth to      Calc. g/ft.      Prin.     

bot. pump      ft. with      ft. suction pipe. drawdown      Prod.     

Producing     

Horizons     

Water levels and pumping tests on various horizons during drilling:

Depth Range	Stat. Level	Pump Level	Draw down	gpm.	Temp.	Producing horizons	Producing formations	Formations cased out

Additional information     

    

    

    

    

    

    

    

    

    

    

    

    

    

    

    

    

    

    

    

    

    

Laboratory Data  
Sample range 1-180, 185-220 Number samples 44 Number Duplicates 40 Cond. Poor to Good  
Yes Yoko 1-220 Date Aug. 3-4, 1939.  
Log No, Cond.      Boxed      Range      Date     

Remarks W-0199 was originally assigned to the County Farm Well, Decatur Co., drilled by Thorpe. See I.G.S. Vol. 33, p. 245.

Microscopic      Strip      Gen.      Blue      Samples       
Study Range      Log      Log      Print      Washed       
Insol. Res.      Strip      Gen.      Insol. Res.      Well       
Study Range      Log      Log      Prepared      Corel.



Kelly, Iowa

Depth -----	225 feet
Geological Formation -----	Pennsylvanian Des Moines Series
Dissolved Solution -----	540
Insoluble Matter -----	18.8
NO <sub>3</sub> -----	0.0
Na -----	63.4
Ca -----	78.5
Mg -----	33.1
Fe -----	0.8
Mn -----	0.1
Al -----	1.9
F -----	Tr.
Cl -----	5.0
SO <sub>4</sub> -----	148.7
HCO <sub>3</sub> -----	392.8
PO <sub>4</sub> -----	0.0
BO <sub>3</sub> -----	4.0
Calc. Hardness -----	333.0