

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

W-4815

RECORD OF WELL

Location:

Town: Renwick (NE) (SW): County Humboldt
SE SW NE sec. 36 T 93 N., R. 27 W. Vernon Twp.

Well name and number Renwick Town Well No. 2, (1951)

Owner Town of Renwick Address _____

Tenant _____ Address _____

Contractor Hoeg & Ames Address Lincoln, Iowa

Drillers Kenneth Kraeger

Drilling dates Started Feb 9, 1951, Finished 23, 1951

Well data:

Elevations: Drilling curb 1155 feet; land surface 1154 feet

Determined by Hand level from RR sta = El of sta - 1156'

Topographic position Upland

Total depth: Reported 226 feet, Measured _____ feet

Drilling method Cable tool

Hole and casing date about 188' 8" of 12" pipe from 0 to 188' 8"
open 12-inch hole from 188' 8" to 226'

Original depth to water 40 ft. ^{above} land surface Date Feb 26, 1951

^{Present} Original elevation of water level 1114± ft.; Source of data observation

Well reflects water level in nearby Well No. 1

Sources of water: Principal Mississippian; Others _____

Production data:

Date

Feb. 26, 1951

Static depth to water

38' ±

Measuring point

land surface

Pumping level

53.3

at

460 ±

g.p.m.

Specific capacity

87.

g.p.m. per ft. drawdown;

Temperature

49 1/2

°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

Fe₂O₃-Mn₂O₃-Al₂O₃

Alkali as sodium

Calcium

Magnesium

Iron (unfiltered)

Manganese

Nitrate

Fluoride

Chloride

Sulfate

Bicarbonate

Hardness (ppm)

Hardness (gpg)

Remarks

Laboratory data:

Sample storage location

Sample range

0-230

No. spls.

48

No. dupls. & cond.

48 Good

Spls. prepared by

AJF & VLM

Washed range

145-230

by

AJF

Driller's log and cond.

Insoluble residues: Prepared by

Studied by

Strip log

Microscopic study

strip log

MAY 14, 1951

Gen. log

Correl. by

NORTHUP

UNITED STATES DEPARTMENT OF THE INTERIOR

Geological Survey
Water Resources Division

Local Well No. 093-27W-36ACD

Aquifer Code(s) MIKH

Water Quality
(ppm)

Owner's Name BENWICK TOWN (1951) #2

W Number 04815

Card Q

State: IOWA 1 9 County: HUMBOLDT 4 6 Town: BENWICK, IOWA

Well No. 4 2 4 9 3 9 N 0 9 3 5 8 4 2 Seq. No. 1 Date 0 9 0 3 6 9

Sampling Depth 2 2 6 Type 1 Kx10⁶ 8 7 0 pH 7 2 Temp. °F

SiO₂ 1 1 1 Ca 1 0 4 Mg 3 7 Na 4 0 K 2 6

HCO₃ 4 8 3 CO₃ 0 SO₄ 1 1 0 Cl 2 Source No. 3 Q

Card R

Duplicate Columns 1-25 from Card Q

F 2 NO₃ 2 PO₄ B Al Fe 1 6

Mn 4 0 Cu Pb Zn

Determined 5 4 5 Solids Ca, Mg 4 1 3 Hardness Non-Carb. 1 7

Color No. R

Card S

Duplicate Columns 1-25 from Card Q

Br I Alk. as CaCO₃ 3 9 6 Free CO₂ SAR

RSC ABS

Alpha (pc/l) Beta (pc/l) Ra (pc/l) U (ug/l)

No. S
80

Recorded by: D. AARONSON

Punched by: T Date:

Published:

4815

Name: Renwick town well #2 (NEW)

Loc SE SW NE 36-93N-27W, Humboldt Co.

T.D. 226'

Drilled Hoeg & Ames. Feb, 1951

Log W-4815 Northrup

Casing 188' 8" of 12" pipe

$$\frac{30.7}{39} = 56. \times 10^{-2}$$

Prod data orig

SWL 38±' 44

PWL 53.3' 45-48-9-19-62 $\frac{43}{100}$

Yield 460± gpm

$$\begin{array}{r} 53 \\ 38 \\ \hline 15 \end{array} \left| \begin{array}{l} 30.7 \text{ ap. cap.} \\ 460. \\ \hline 43 \\ 100 \end{array} \right.$$

$$\begin{array}{r} 0.56 \\ 37 \overline{) 30.70} \\ \underline{185} \\ 220 \\ \underline{222} \end{array}$$

piezometric $\frac{1160}{38} = 1122$

Tur Pump - 180 GPM SET AT 108' + 5' OF SUCTION PIPE

Analyses: No. 16836(3314) 2/26/51; No. 14912(3559) 1/29/52; No. 1470(1793) 12/30/59

CHECK - METER - ALL

Elevation		1160	
Formation	Depth	Top	Base
Hampton (M.C.?)	178	1082	

6655900 soft water
 1551900
 5104000 gals. in 166 days

48415100 unsoftened water
 47240300
 11748000 g. in 166 days
 5704000
 62788000 total

pop. 477 use
 470

80 gpd/per.
 470 | 37810
 1221
 930
 2910
 2790

37810 gpd
 166 | 6278800
 279
 1160
 1170
 650
 370
 5710
 223
 518