FCH
PMJ

WRD Exp. (GW)
Aug. 1964

U. S. DEPARTMENT OF THE INTERIOR — GEOLOGICAL SURVEY

Water Resources Division Well Schedule Form

MASTER CARD

Record by R.W. COBLE Source of data FILE Date 6-24-65 Map COUNTY HWY 1:63,360

State IOWA [1 6] County (or town) POCAHONTAS [7 6]

Latitude: 4 2 4 8 4 7 N Longitude: 0 7 4 3 1 3 1 Sequential number:

Lat-long accuracy: 2 T 92 N, R 31 W Sec 5 , SW ¼, SE ¼, NE ¼, 5 B & M

Local well number: 0 9 2 - 0 3 1 - 0 5 a d c Other number: W-2129

Local use: 0 2 1 2 9 ... 4 S C I T Y Owner or name: ROLFE

Owner or name: R O L F E , I O W A Address: ROLFE, IOWA

Ownership: (C) County, (F) Fed Gov't, (M) City, (N) Corp or Co, (P) Private, (S) State Agency, (W) Water Dist — M

Use of water: (A) Air cond, (C) Comm, (D) Dewatering, (F) Fire, (H) Dom, (I) Irr, (N) Ind, (P) P S, (S) Stock, (T) Instit, (U) Unused — P

Use of well: (A) Anode, (D) Drain, (G) Seismic, (O) Obs, (P) Oil-gas, (R) Recharge, (S) Spring, (T) Test, (U) Unused, (W) Withdraw, (X) Waste, (Z) Destroyed — W

GEOL + PARTIAL PHYSICAL

DATA AVAILABLE: Well data 5 Freq. W/L meas.: NONE Field aquifer char.

Hyd. lab. data:

Qual. water data; type:

Freq. sampling: Pumpage inventory: yes no, period:

Aperture cards: yes

Log data: GEOL.

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 1?? ft Meas. Rept REPT accuracy 6

Depth cased: (first perf.) ft Casing type: ; Diam. in

Finish: (C) porous concrete, (F) gravel w. (perf.), (G) gravel w. (screen), (H) horiz. gallery, (O) open end, (P) perf., (S) screen, (T) sd. pt., (W) shored, (X) open hole, (Z) other

Method Drilled: (A) air rot, (B) bored, (C) cable, (D) dug, (H) hyd rot., (J) jetted, (P) air percussion, (R) reverse rotary, (T) trenching, (V) driven, (W) drive wash, (Z) other

Date Drilled: 7-1947 [9 4 7] Pump intake setting: ft

Driller: DICK BUSH (name), (address)

Lift (type): (A) air, (B) bucket, (C) cent, (J) jet, (L) multiple (cent.), (M) multiple (turb.), (N) none, (P) piston, (R) rot, (S) submerg, (T) turb, (Z) other Deep Shallow

Power (type): diesel, elec, nat gas, gasoline, hand, LPG gas, wind; H.P. Trans. or meter no.

Descrip. MP LAND SURFACE ft above below lsd, Alt. MP 1176

Alt. LSD: 1176 [1 1 7 6] Accuracy: (source) ALTIMETER 7

Water Level ft above below MP; ft above below lsd Accuracy:

Date meas: Yield: gpm Method determined

Drawdown: ft Accuracy: Pumping period hrs

QUALITY OF WATER DATA: Iron ppm Sulfate ppm Chloride ppm Hard. ppm

Sp. Conduct K x 10[6] Temp. °F Date sampled

Taste, color, etc.

31 W - 5 adc

Well Number 47 (N) S 94 31
d m s d m s

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD (1–19)	**Physiographic Province:** CENT. LOW LAKE (20–22)	**Section:** WEST.

Drainage Basin: DES MOINES (23–25) **Subbasin:** ______ (26)

Topo of well site: local depression (D), flat surface (F), hilltop (H), hillside (S), terrace (T), valley flat (V), ______ (27)

MAJOR AQUIFER: CRETACEOUS (system), LOWER (series) (28–29) DAKOTA SANDSTONE (aquifer, formation, group) D (30–31)

Lithology: SAND (32–33) **Origin:** MARINE (34) **Aquifer Thickness:** ______ ft

(35–37) **Length of well open to:** ______ ft (38–40) **Depth to top of:** 98 ft (41–43)

MINOR AQUIFER: ______ (system), ______ (series) (44–45) ______ (aquifer, formation, group) (46–47)

Lithology: ______ (48–49) **Origin:** ______ (50) **Aquifer Thickness:** ______ ft

(51–53) **Length of well open to:** ______ ft (54–56) **Depth to top of:** ______ ft (57–59)

Intervals Screened: ______

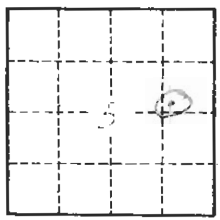
Depth to consolidated rock: ______ ft 95 (60–63) **Source of data:** SAMPLES. (64)

Depth to basement: ______ ft (65–68) **Source of data:** ______ (69)

Surficial material: SANDY TILL (70–71) **Infiltration characteristics:** POOR (72)

Coefficient Trans: ______ gpd/ft (73–75) **Coefficient Storage:** ______ (76–78)

Coefficient Perm: ______ gpd/ft^2; **Spec cap:** ______ gpm/ft; **Number of geologic cards:** ______ (79)



W² 2129
Pocahontas

Rolfe — Rolfe Town Well — Oct '45

SE/c NE Sec. 5 T. 92 N. R. 31 W.

0 - 95 Pleistocene
95 - 110 Dakota.

Glacial drift is definitely to 55 feet. Below this there is sand and gravel which I have called Pleistocene but which may possibly be Dakota.

The top of the Cretaceous is a gray, unctuous, non-calcareous shale from 95 to 98 feet. Below this to 110 the Dakota is a course sandstone with rounded and conchoidal chert pebbles.

In the last sample from 103 to 110 feet is 30% light gray, fine-grained, dense dolomite.

IOWA GEOLOGICAL SURVEY
Iowa City, Iowa

Well Log Record

Owner of well Rolfe City County

Tenant Town

Location sec. , T. N., R. E. W. Twp.

Curb elevation ft. Present depth ft. final depth ft.

Static level: (Depth to water above / below curb) ft. Pumping level ft. at gpm.

Contractor Dick Bush Date drilled

Description*	FEET			Description*	FEET		
	Thick	From	To		Thick	From	To
Top soil				Blue clay			
Blue clay & sand				sand			
Blue clay				rock			105
yellow clay	20						
dark blue clay							
light blue clay	4						
				(some water)			
yellow clay							
yellow sand & clay	31						

*Abbreviate descriptions; use one line for each formation.

Remarks on water zones and casings

Not finished as of July 20. 1945

Temperature: Air °F., Water °F. at A.M. P.M. 19

Record obtained from Recorded by

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

W-2129

RECORD OF WELL

Location:

Town: Rolfe (N E / S W); County Pocahontas

SW SE NE ¼ sec. 5 T. 92 N., R. 31 E. W. Garfield Twp.

Well name and number Rolfe Town Well #2

Owner _____ Address _____

Tenant _____ Address _____

Contractor D. Bush Address _____

Drillers D. Bush

Drilling dates July 1945

Well data:

Elevations: Drilling curb 1176 feet; Land surface _____ feet

Determined by _____

Topographic position _____

Total depth: Reported 110 feet, Measured _____ feet

Drilling method cable tool

Hole and casing data _____
(Give amount, size, kind, and depth of all casing; type and position of seals and packers; cementing; how finished--perforated pipe, screen, gravel pack, open hole, etc.)

Original depth to water _____ ft. above/below _____ Date _____

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

Sources of water: Principal Dakota; Others _____

Production data: Date _____

Static depth to water _____ Measuring point _____

Pumping level _____ at _____ g.p.m.

_____ _____

_____ _____

_____ _____

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 sampled				
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 _____

Sample range 10-110 No. spls. 21 No. dupls. & cond. 18 G. to F.

Spls. prepared by Baldwin Washed range 101-110 by Baldwin

Driller's log and cond. No

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

Microscopic study 1-110 Ed strip log oct 1945 Ed

Gen. log _____ Correl. by E.S. Schultz