WRD Exp. (GW)
Aug. 1964

Punched ERC Verified PMJ
30070

U. S. DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Water Resources Division Well Schedule Form

MASTER CARD

Record by R.W. COBLE Source of data FICE Date 6/22/65 Map COUNTY HWY. 1:63,360

State IOWA 16 County (or town) BUENA VISTA 11

Latitude: 42 49 35 N Longitude: 095 09 53 Sequential number: 1

Lat-long accuracy: 2 T. 93 N, R. 37 W Sec. 36, SWNW¼, NE¼ SW¼ 5

Local well number: 093 37 W 36 C A B C Other number: W- B & M

Local use: 35 CITY

Owner or name: REMBRANDT IOWA Owner or name: TOWN OF REMBRANDT Address: REMBRANDT, IA.

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, (C) Seismic, (O) Obs, (P) Oil-gas, (R) Recharge, (S) Spring, (T) Test, (U) Unused, (W) Withdraw, (X) Waste, (Z) Destroyed W

DATA AVAILABLE: Well data 2 Freq. W/L meas.: INVENTORY Ø Field aquifer char.

Hyd. lab. data:

Qual. water data: type: COMPLETE C

Freq. sampling: INTERMITTENT I Pumpage inventory: yes / no, period:

Aperture cards: yes

Log data: GEOLOGIST & DRILLER'S LOG G

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 439 ft 439 Meas. (est) accuracy 6

Depth cased (first perf.) 409 ft 409 Casing type: STEEL ; Diam. 6 in 6

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 S

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 C

Date Drilled: MAY 1935 5 35 Pump intake setting: ft

Driller: GUS PECH name LE MARS, IA. address

Life (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 D

Power (type): nat diesel, elec, gas, gasoline, hand, gas, wind; LPG

Trans. or motor no.

Descrip. MP LSD ft above / below Land, Alt. MP 1331

Alt. LSD: 1331 1331 Accuracy (approx.) ALTIMETER 7

Water Level 140 ft above / below MP; Ft above / below lsd 140 accuracy: DRILLER'S LOG D

Date meas: MAY 1935 5 35 Yield: 55 gpm 55 Method determined 1

Drawdown: ft Accuracy: Pumping period 8 hrs 8

QUALITY OF WATER DATA: Iron 8.4 ppm 7 Sulfate 715 ppm 8 Chloride 20.5 ppm 0 Hard. 979 ppm 8

Sp. Conduct 1810 K x 10^6 5 Temp. 52 °F 52 Date sampled 12/15/59 D 59

Taste, color, etc.

093-37W-36 CABC

Well Number 42 49 35 D 095 09 53
d m s d m s

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD | Physiographic Province: CENTRAL LOWLAND 12 | Section: WESTERN

LAKE B | Drainage Basin: RACCOON 25A | Subbasin:

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

MAJOR AQUIFER: CRETACEOUS system, LOWER series, K1 DAKOTA SANDSTONE aquifer, formation, group D1

Lithology: (SOFT) SANDSTONE SV | Origin: MARINE G | Aquifer Thickness: ft

Length of well open to: 30 ft | Depth to top of: 340 ft 340

MINOR AQUIFER: system, series, aquifer, formation, group

Lithology: | Origin: | Aquifer Thickness: ft

Length of well open to: ft | Depth to top of: ft

Intervals Screened: 409'-439'

Depth to consolidated rock: 272 ft 272 | Source of data: WELL CUTTINGS C

Depth to basement: ft | Source of data:

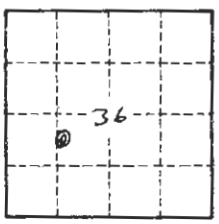
Surficial material: CALC. TILL CT | Infiltration characteristics: POOR 4

Coefficient Trans: gpd/ft | Coefficient Storage: EST. .0001 104

Coefficient Perm: gpd/ft²; Spec cap: gpc/ft; Number of geologic cards:

CASING

6" 0-397'
5" 397'-409' } NOT CEMENTED.
5" SCREEN 409'-439'



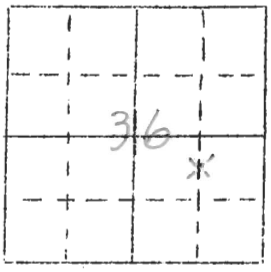
GPO 844-225

30070 no W-number

No samples

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

RECORD OF WELL



Location:

Town: Rembrandt (N E / S W); County Buena Vista

N. center SW 1/4 sec. 36 T. 93 N., R. 37 E. W. Barnes Twp.

Well name and number City Well

Owner _____ Address _____

Tenant _____ Address _____

Contractor Gus Pech Fdry & Mfg Co Address La Mars

Drillers Walter Hartwick

Drilling dates 3/12/35 - 5/4/35

Well data:

Elevations: Drilling curb 1331 feet; Land surface _____ feet

Determined by _____

Topographic position _____

Total depth: Reported 439 feet, Measured _____ feet

Drilling method cable

Hole and casing data 397 of 6" pipe 31' of screen. 6" hole
(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.)
25' of 5" casing screwed to top of screen. gravel approximately 5 to 6' below screen

Original depth to water 140 ft. below above Date _____

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

Sources of water: Principal Dakota 409-439; Others _____

CASING DIAGRAM

Vertical scale _____

LOG

Yellow Clay	0-11
Brown Clay	11-
Blue Clay	15-95
Yellow Clay	95-55
Blue Clay	55-153
Yellow Clay	153-168
Blue Clay	168-233
Fn. Blue Mud	233-253
Fn. Wh. Sd	253-255
Coarse Granite Clay	255-260
Yellow mud & Gr.	260-261
Blue Clay	261-262
Granite	262-263
Granite Clay	263-265
Fn. Blue Clay	265-268
Fn. clay & Sd	268-272
Gray shale	272-290
Red Sh.	290 294
Hard shale	294 301
Rock Sh.	301 305
Orange Sh.	305-315
Red Boon Clay	315-320
Lt. Blue	320 333
Sandstone	333-439

Production data: Date _____

Static depth to water 140 Measuring point end

Pumping level _____ at 55 g.p.m.

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

Pump data; Type pump Turbine Column Dia. _____ Length 180

Cylinder or bowls: Dia. _____ Length _____ Suction pipe _____

Power Electric Airline _____

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

Use of water city supply

WATER ANALYSES (in parts per million)

Date sampled	Aug 19, 1936			
Sampled by	A. C. Tester			
Total solids	1473.0			
Insoluble matter	30.0			
Alkalinity (Meo)	312.0			
Alkalinity (Phn)	0.0			
pH	7.1			
Fe_2O_3+ Mn_2O_3+Al_2O_3	8.5			
Alkali as sodium	63.35			
Calcium	263.35			
Magnesium	66.85			
Iron (unfiltered)	1.5			
Manganese	0.50			
Nitrate	8.9			
Fluoride	0.0			
Chloride	6.0			
Sulfate	722.00			
Bicarbonate	380.64			
Hardness (ppm)	936.0			
Hardness (gpg)				

Remarks H_2S odor which decreases over long pumping period

Laboratory data: Sample storage location _____

Sample range No samples No. spls. _____ No. dupls. & cond. _____

Spls. prepared by _____ Washed range _____ by _____

Driller's log and cond. yes good

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

Microscopic study _____ strip log copied from drillers log

Gen. log _____ Correl. by _____