WRD Exp. (GW)
Aug. 1964

Verified ERC Punched FCH

U. S. DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Water Resources Division Well Schedule Form

MASTER CARD

Record by P. J. Horick Source of data Files Date 9/24/65 Map H. & T.

State Iowa [16] County (or town) Kossuth [55]

Latitude: 43 13 06 N Longitude: 094 19 28 Sequential number: 1

Lat-long accuracy: 2 T 97 N, R 29 W Sec 18, SW ¼, SW ¼, NW ¼ 5PM

Local well number: 097 29W 18 B C C Other number: W-2333 B & M

Local use: 02333 Owner or name: Lone Rock town

Owner or name: LONE ROCK TOWN Address: Lone Rock, 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]

DATA AVAILABLE: Well data [2] Freq. W/L meas.: INVENTORY None [I] 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 log [G]

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 167 ft 167 Meas. rept rept. accuracy [6]

Depth cased: (first perf.) 156 ft 156 Casing type: STEEL Diam. 8 in [8]

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

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

Date Drilled: Feb. 1946 946 Pump intake setting: ft

Driller: Knut Bonnicksen, Ringsted, Iowa (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 ft above below lsd, Alt. MP

Alt. LSD: 1214 1214 Accuracy: (source) altimeter [7]

Water Level 73 ft above below MP; above below lsd 73 Accuracy: rept. [6]

Date meas: FEB. 1946 246 Yield: 10 gpm 10 Method determined

Drawdown: ft Accuracy: Pumping period hrs

QUALITY OF WATER DATA: Iron 1.5 ppm [5] Sulfate 464 ppm [7] Chloride 3 ppm [0] Hard. 448 ppm [7]

Sp. Conduct 1520 K x 10^6 [5] Temp. 48 °F 48 Date sampled 2/6/60 260

Taste, color, etc. SLIGHTLY TURBID WITH SLIGHT YELLOW COLOR OR RECEIPT IN LAB.

97-29W-18 BCC

Well Number 43.13.06 N 094.19.28.1
(d m s d m s)

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD Physiographic Province: Cent. Lows. 12 Section: West. Lake

B Drainage Basin: DES MOINES 258 Subbasin:

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

MAJOR AQUIFER: Devonian (system), Middle (series) D2 Cedar Valley (aquifer, formation, group) MC

Lithology: fine dolomite 2D Origin: marine 6 Aquifer Thickness: ft

Length of well open to: 11 ft 11 Depth to top of: 156 ft 156

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:

Depth to consolidated rock: 134 ft 134 Source of data: sample log C

Depth to basement: ft Source of data:

Surficial material: sandy till ST Infiltration characteristics: poor 4

Coefficient Trans: gpd/ft Coefficient Storage:

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

Geology:

Pleistocene 0-134'
Cretaceous 134-156'
Devonian 156-167'

W-2333

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

RECORD OF WELL

Location:

Town: Lone Rock (N E / S W): County Kossuth

SW SW NW sec. 18 T 97 N., R. 29 E. W. Burt Twp.

Well name and number Lone Rock Town Well (1946)

Owner _____ Address _____

Tenant _____ Address _____

Contractor Bonnichsen Address _____

Drillers Chalmer Bonnichsen

Drilling dates finished Feb 22, 1946

Well data:

Elevations: Drilling curb 1214 feet; Land surface 1214 feet

Determined by Aneroid by W.E.H & T.C.P.

Topographic position Upland

Total depth: Reported 167 feet, Measured _____ feet

Drilling method _____

Hole and casing data 156 ft of 8-inch pipe

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

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

Sources of water: Principal L.C ; Others _____

CASING DIAGRAM

Vertical scale _____

LOG

yel cl 0-30

bl cl 30-130

sd 130-134

rock 134-135

sh 135-155

rock 155-167

3 ft cavity 164-167

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 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 _____

Sample range 0-165 No. spls. 27 No. dupls. & cond. 27 F

Spls. prepared by D G + SP Washed range 130-165 by S.P.

Driller's log and cond. _____

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

Microscopic study 0-167 strip log July 20, 1996 ES

Gen. log _____ Correl. by E Schultz