

WRD Exp. (GW)  
April 1966

PUNCHED *SD* VERIFIED *KS*  
ROLLA COMPUTATION BRANCH

Well No. 074-21W-11DBB

### WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR

GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

#### MASTER CARD

Record by D. ARONSON Source of data FILE Date 2/20/68 Map: 63,360 COUNTY HWY.

State IOWA County (or town) MARION 63

Latitude: 411329 N Longitude: 0931429 Sequential number: 1

Lat-long accuracy: 2 T 74 S, R 21 E Sec 11, NW 1, NW 1, SE 5

Local well number: 07421W11D3B Other number: W-2057

Local use: 02057 45 CITY T I O Owner of name: MELCHER CITY TEST #10 (1945)

Owner or name: MELCHER IOWA Address: MELCHER, IOWA

Ownership: County, Fed Gov't, City, Corp or Co, Private, State Agency, Water Dist M

Use of Air cond, Bottling, Comm, Dewater, Power, Fire, Dom, Irr, Med, Ind, P S, Rec, water: P

Use of well: Anode, Drain, Seismic, Heat Res, Obs, Oil-gas, Recharge, Test, Unused, Withdraw, Waste, Destroyed. W

DATA AVAILABLE: Well data 1 Freq. W/L meas.: INVENTORY Field aquifer char. 0

Hyd. lab. data: 0

Qual. water data; type: COMPLETE

Freq. sampling: INTERMITTENT (6/19/45) Pumpage inventory: no period: 0

Aperture cards: 0

Log data: GEOLOGIST LOG

#### WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 119 ft 119 Meas. DRILLER'S LOG accuracy 3

Depth cased; (first perf.): 105 ft Casing type: STEEL; Diam. 6 5/8 in 7

Finish: porous concrete, gravel w. (perf.), gravel w. (screen), horiz. gallery, end, open perf., screen, sd. pt., shored, well hole, other X

Method Drilled: air bored, cable, dug, hyd jettted, air reverse, percussion, rotary, trenching, driven, drive wash, other C

Date Drilled: JUNE 1945 945 Pump intake setting: 0 ft

Driller: ART BRUINKOOL PELLA, IA.

Lift (type): air, bucket, cent, jet, multiple, multiple, none, piston, rot, submerg, turb, other D Deep 0 Shallow 40

Power (type): diesel, elec, gas, gasoline, hand, gas, wind; H.P. 0 Trans. or meter no. 0

Descrip. MP TOP OF CASING 2 ft above LSD, Alt. MP 945.14

Alt. LSD: 943.2 943 Accuracy: (source) INSTRUMENT 0

Water Level 244.58 ft above below MP; Ft below LSD 44 Accuracy: TAPED WITHIN 1 FT A

Date mea: JUNE 1945 645 Yield: 25 gpm 25 Method determined 0

Drawdown: 50.5 ft 50 Accuracy: 0 Pumping period 44 hrs 44

QUALITY OF WATER DATA: Iron 1.02 4 Sulfate 39.1 2 Chloride 10.5 0 Hard. 384 7

Sp. Conduct 811 K x 10<sup>6</sup> 4 Temp. 0 Date sampled SEPT. 1960 960

Taste, color, etc. SAMPLE CLOUDY ON RECEIPT IN LAB.

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Latitude-longitude 41, 13, 29 <sup>W</sup> 093, 14, 29.1  
d m s d m s

HYDROGEOLOGIC CARD

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

TILL PLAIN E Drainage Basin: DES MOINES 25B Subbasin:         

Topo of well site: (D) depression, stream channel, dunes, flat, hilltop, sink, swamp, (C) (B) (H) (K) (L) (N) (P) (S) (T) (U) (V) UPLAND F  
offshore, pediment, hillside, terrace, undulating, valley flat

MAJOR AQUIFER: QUATERNARY, PLEIST QG aquifer, formation, group GIX  
system series

Lithology: COARSE SAND & GRAVEL 4R Origin: GLACIAL 0 Aquifer Thickness: 10 ft

10 Length of well open to: 0 ft 0 Depth to top of: 105 ft 105  
33 37 38 40 41 43

MINOR AQUIFER:                   aquifer, formation, group           
system series

Lithology:                   Origin:                   Aquifer Thickness:          ft

         Length of well open to:          ft          Depth to top of:          ft           
31 35 34 36 37 39

Intervals Screened: NONE

Depth to consolidated rock: 115 ft 115 Source of data: WELL CUTTINGS C  
40 42 43 44

Depth to basement:          ft          Source of data:                    
45 46 48 49

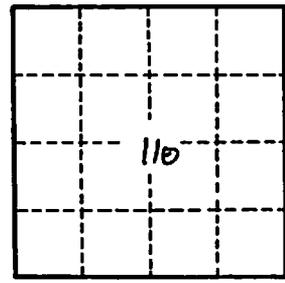
Surficial material: LOESS Q Infiltration characteristics: POOR 4  
70 71 72 73

Coefficient Trans:          gpd/ft          Coefficient Storage:                    
74 75 76 77

Coefficient Perm:          gpd/ft<sup>2</sup>; Spec cap: 0.49 gpd/ft; Number of geologic cards:                    
78 79

CASING:

107' OF 6 5/8" PIPE + 2 FT TO 105 FT.  
OPEN HOLE 105 FT TO 119 FT.

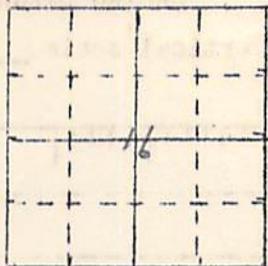


Well No. 074-21W-11DBB

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

W-2057

RECORD OF WELL



Location:

Town: Melcher #10 ( N E)  
( S W); County MARION

NW 1/4 NW 1/4 SE 1/4 sec. 11 T. 74 N., R. 21 W. Dallas Twp.

Well name and number Melcher test well No. 10 (1945)

Owner Town of Melcher Address \_\_\_\_\_

Tenant \_\_\_\_\_ Address \_\_\_\_\_

Contractor Art Bruinekool Address Pella, Iowa

Drillers Tunis Schokel

Drilling dates June 12-14, 1945

Well data:

Elevations: Drilling curb 943.2 feet; Land surface 943.2 feet

Based on assumed altitude of 950' at top of rail at Melcher station

Determined by spirit levels by W.E.H. & D.A.B.

Topographic position Upland

Total depth: Reported \_\_\_\_\_ feet, Measured 119 feet

Drilling method Cable tool

Hole and casing data 6 5/16" hole to

(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 44.71 <sup>above</sup> ft. below Land Surface Date June 17, 1945

Original elevation of water level 898.46 ft.; Source of data U.S.G.S measurements

Sources of water: Principal sand from 105' to 116'; Others None - other

Horizon cased out.

Production data: \_\_\_\_\_ Date \_\_\_\_\_  
 Static depth to water \_\_\_\_\_ Measuring point top casing - Elev. 945.14  
 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 <sub>2</sub> O <sub>3</sub> + Mn <sub>2</sub> O <sub>3</sub> + Al <sub>2</sub> O <sub>3</sub>	_____	_____	_____	_____
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'-119' No. sps. 24 No. dupls. & cond. 23 f-p  
 Spis. prepared by Poterson Washed range \_\_\_\_\_ by \_\_\_\_\_  
 Driller's log and cond. \_\_\_\_\_  
 Insoluble residues: Prepared by \_\_\_\_\_ Studied by \_\_\_\_\_ Strip log \_\_\_\_\_  
 Microscopic study \_\_\_\_\_ strip log \_\_\_\_\_  
 Gen. log \_\_\_\_\_ Correl. by DJB