

Punched FCB

WRD Exp. (CM)
Aug. 1964

Verified PMJ

U. S. DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Water Resources Division Well Schedule Form

MASTER CARD

1:63,360

Record by D.B. AARONSON Source of data FILE Date 6/16/65 Map COUNTY HWY.State IOWA County CHEROKEE Sequential number 1Latitude: 42° 47' 39" N Longitude: 095° 38' 25" WLat-long accuracy: 2 sec 92 S, 41 E Sec 12 SE 5 SW 5Local well number: 092711W12CCD Other number: W-8186Local use: 08106 56 CITY Owner or name: TOWN OF MERIDENOwner or name: MERIDEN IOWA Address:Ownership: County, Fed Gov't, City, Corp or Co, Private, State Agency, Water Dist MUse of water: Air cond, Comm, Dewatering, Fire, Dom, Irr, Ind, P-S, Stock, Instit, Unused PUse of well: Anode, Drain, Seismic, Obs, Oil-gas, Recharge, Spring, Test, Unused, Windrow, Waste, Destroyed WDATA AVAILABLE: Well data 1 Freq. W/L meas.: INVENTORY Field aquifer char. 0

Hyd. lab. data:

Qual. water data: type: COMPLETEFreq. sampling: INTERMITTENTLY Pumpage inventory: I yes no, period:

Aperture cards:

Log data: GEOLOGIST LOG

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 380 ft Meas. 380 ftDepth cased: 353 ft Casing type: STEEL Diam. 6 in

Finish: (C) porous gravel w. concrete, (F) gravel w. (screen), (R) open perfor., (S) screen, ad. pt., (W) bored, (X) other, (Z) other

Method: (A) air bored, (B) cable, (C) dug, (D) hyd jetted, (E) air reverse, (F) trenching, (G) driven, (H) drive, (I) wash, (J) other

Date drilled: 1956 956 Pump intake setting: ftDriller: M.F. MERKLEY

Lift: (A) air, (B) bucket, (C) cent, (D) multiple, (E) multiple, (F) nouc, (G) piston, (H) rot., (I) submerg, (J) turb, (K) other, (L) Deep, (M) Shallow

Power: (type): diesel, elec, gas, gasoline, hand, gas, wind, H.P. Trans. of meter no.Descrip. MP LSD ft above below lsd, Alt. MP 1410Alt. LSD: 1410 ft Accuracy: ALT.Water Level: 222 ft above below MP; Ft below lsd Accuracy: REPORTEDDate meas: 1956 856 Yield: 80 gpm Method determinedDrawdown: 10 ft Accuracy: REPT. Pumping period: 6 hrsQUALITY OF WATER DATA: Iron 6.0 Sulfate 963 Chloride 11 Hard. 1110Sp. Conduct 2,190 K x 10⁶ Temp. 6 Date sampled 23 MAR 1964Taste, color, etc. YELLOW ON RECEIPT IN LAB.

92-41W-12 CCD

Well Number 42, 47, 39 035, 38, 25

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD Physiographic Province: CENTRAL LOWLAND 1:2 Section: DISSECTED

TILL PLAINS E Drainage Basin: LITTLESIOUX 3:6 C Subbasin: 26

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

MAJOR AQUIFER: CRETACEOUS, LOWER K-I DAKOTA SANDSTONE 10 11 aquifer, formation, group 36 37

Lithology: 2: V Origin: MARINE 6 Aquifer Thickness: 16 ft 34

Length of well open to: 12 ft 33 37 Depth to top of: 345 ft 31 32 33

MINOR AQUIFER: system series 44 45 aquifer, formation, group 46 47

Lithology: 18 19 Origin: 30 Aquifer Thickness: ft 30

Length of well open to: ft 31 33 Depth to top of: ft 37 38

Intervals Screened: 353-365

Depth to consolidated rock: 338 ft 33 34 Source of data: C 41

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

Surficial material: SILT OR LOESS N-Q Infiltration characteristics: POOR 72 73

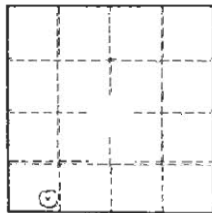
Coefficient Trans: gpd/ft 73 75 Coefficient Storage: 76 77

Coefficient Perm: gpd/ft²; Spec cap: 8.0 rps/ft; Number of geologic cards: 1 79

CASING

6" - 0 TO 370'

PERF. 353-365'



IOWA GEOLOGICAL SURVEY
In Cooperation with U. S. Geological Survey
RECORD OF WELL

W 8106

Location:

(N E)

Town: MERIDEN

(S W)

County CHEROKEE

SE SW SW Hwy #5 sec. 12 T. 92 N., R. 41 W. Twp.

Well name and number

Owner TOWN OF MERIDEN

Address

Tenant

Address

Contractor

M. F. MURKELLY 63

Address

Drillers

Drilling dates

1956

Well data:

Altitudes: Drilling curb

feet;

Land surface

1410

feet

Determined by

altitude (LLS)

Topographic position

Total depth: Reported

380

feet, Measured

feet

Drilling method

Hole and casing data

370' 6" SCREWED CASING

PERFORATED 353'-365'

NOTE: ABOVE DATA LOOKS WRONG IN LIGHT OF WHAT

SAMPLE LOG SHOWS.

Original depth to water

222

above
ft. below

Date

Source of data

Sources of water: Principal

Others

Production Data

Date _____
 Static water level 222
 Measuring point _____
 Pumping water level 232
 Yield (g. p. m.) 80
 Duration of pumping _____
 Specific capacity _____

Pump Data

Type pump _____ Column diameter and length _____
 Cylinder or bowls diameter and length _____
 Suction pipe _____ Airline _____
 Power _____ Production _____ g. p. m. for _____ hours per day
 Use of water _____

Dissolved constituents and properties (in parts per million except as indicated)

Date sampled _____
 Sampled by _____
 Silica (SiO₂) _____
 Iron (Fe) _____
 Manganese (Mn) _____
 Calcium (Ca) _____
 Magnesium (Mg) _____
 Potassium (K) _____
 Sodium (Na) _____
 Carbonate (CO₃) _____
 Bicarbonate (HCO₃) _____
 Sulfate (SO₄) _____
 Chloride (Cl) _____
 Fluoride (F) _____
 Nitrate (NO₃) _____
 Dissolved solids _____
 Hardness (as CaCO₃) _____
 Total _____
 Grains per gallon _____
 Noncarbonate _____
 Alkalinity (as CaCO₃) _____
 pH _____
 Specific conductance _____
 (micromhos at 25°C) _____
 Temperature (°F) _____
 Analysis No. _____

Laboratory Data

Well No. W 8106 Sample range 0-376 No. of samples 75
 No. of dupls. and cond. 70 Fair Washed range _____
 Samples prepared by Darland Date 11/8/56
 Logged by NORTHUP Date 2/12/57
 Correlations by _____ Date 2/12/57

UNITED STATES DEPARTMENT OF THE INTERIOR

Geological Survey
Water Resources DivisionLocal Well No. 092-41W-12 CCDAquifer Code(s) KIDIOwner's Name MERIDEN CITY (1956)W Number 08106Water Quality
(ppm)

Card Q

State: IOWA 19 County: CHEROKEE 18 Town: MERIDEN, IOWA

Well No. 424739N 0953825 Seq. No. 1 Date 082668

Sampling Depth 380 Type 1 Kx10⁶ 2200 pH 7.0 Temp. °F 52

SiO₂ 28 Ca 280 Mg 102 Na 120 K 12

HCO₃ 429 CO₃ 0 SO₄ 970 Cl 13 Source No. 3 Q

Card R

Duplicate Columns 1-25 from Card Q

F 6 NO₃ 2 PO₄ 1 B 1 Al 1 Fe 20

Mn 12 Cu 1 Pb 1 Zn 1

Solids 1890 Hardness Non-Carb. 768

Determined 1890 Calc. 1120 Ca, Mg 1120

Color 1 No. R

Card S

Duplicate Columns 1-25 from Card Q

Br 1 I 1 Alk. as CaCO₃ 352 Free CO₂ 1 SAR 1

RSC 1 ABS 1 1

Alpha (pc/l) 1 Beta (pc/l) 1 Ra (pc/l) 1 U (ug/l) 1

No. S
80Recorded by: D. AARONSONPunched by: T Date: 10/10/68

Published: _____

UNITED STATES DEPARTMENT OF THE INTERIOR
Geological Survey
Water Resources Division

092-41W-12 ccd

W-8106

Water Quality
(ppm)

KDD

Card Q

5703

State: IOWA 1.6 County: CHEROKEE 1.8 Town: MERIDEN

Well No. 424739N 0953825 Seq. No. 1 Date 092958

Sampling Depth 380 Type 1 Kx10⁶ 2080 pH 7.2 Temp. °F 57

SiO₂ 231 Ca 291 Mg 86 Na 126 K 11

HCO₃ 405 CO₃ 0 SO₄ 979 Cl 13 Source No. 3 Q

Card R

Duplicate Columns 1-25 from Card Q

F 11 NO₃ 49 PO₄ 1 B 1 Al 1 Fe 19

Mn 063 Cu 1 Pb 1 Zn 1

Solids 1890 Cal. 1 Ca, Mg 1080 Hardness 748

Determined 1890 Color 1 No. R

Card S

Duplicate Columns 1-25 from Card Q

Br 1 I 1 Alk. as CaCO₃ 332 Free CO₂ 1 SAR 1

RSC 1 ABS 1 1 1

Alpha (pc/l) 1 Beta (pc/l) 1 Ra (pc/l) 1 U (ug/l) 1

No. 5
80

Recorded by: D. B. AARONSON

Verified PMJ
Punched FCH Date: _____
Published: _____

UNITED STATES DEPARTMENT OF THE INTERIOR
Geological Survey
Water Resources Division

092-41W-12 ccd

W-8106

Water Quality
(ppm)

KDD

Card Q

State: IOWA 1.6 County: CHEROKEE 1.8 Town: MERIDEN

Latitude Longitude Seq. No. Date

Well No. 424739N 0953825 1 032363

Sampling Depth 380 Type 1 Kx10⁶ 2190 pH 7.4 Temp. °F

SiO₂ 33! Ca 296! Mg 90! Na 126! K 12!

HCO₃ 420 CO₃ 0 SO₄ 963! Cl 111! Source No. 3 Q

Card R

Duplicate Columns 1-25 from Card Q

F 0.9 NO₃ 0.4 PO₄ B Al Fe 6.0

Mn 0.60 Cu Pb Zn

Solids Hardness

Determined 1860 Calc. Ca, Mg 1110 Non-Carb. 766

Color No. R

Card S

Duplicate Columns 1-25 from Card Q

Br I Alk. as CaCO₃ 344 Free CO₂ SAR

RSC ABS

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

Verified PMJ

No. 5
80

Recorded by: D. B. AARONSON

Punched by: Funched FCH Date:

Published: