

WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR

GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

MASTER CARD

Record by D. AARONSON Source of data FILE Date 7/28/66 Map 1:63,360 COUNTY HWY.

State IOWA County MAHASKA

Latitude: 41° 28' 15" N Longitude: 092° 39' 05" W Sequential number: 1

Lat-long accuracy: 2 T. 77 S. R. 16 E Sec. 13 NE 1/4, SW 1/4, SE 1/4, SW 1/4

Local well number: 07716W13CAAA Other number: W-0212

Local use: 00212 30CITY Owner or name: NEW SHARON CITY WELL (1930)

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

Use of water: (A) Air cond, Bottling, Comm, Dewater, Power, Fire, Dom, Irr, Mad, Ind, P S, Rec, (S) Stock, Instit, Unused, Repressure, Recharge, Desal-P S, Desal-other, Other U

Use of well: (A) Anode, Drain, Seismic, Heat Res, Obs, Oil-gas, Recharge, Test, Unused, Withdraw, Waste, Destroyed 2

DATA AVAILABLE: Well data 3 Freq. W/L meas.: INVENTORY Field aquifer char. 0

Hyd. lab. data: 0

Qual. water data: type: PARTIAL

Freq. sampling: IRREGULAR (OCT 29, 1962) Pumpage inventory: yes no, period: 0

Aperture cards: 0

Log data: GEOLOGIST-DRILLER'S

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 2139 ft Meas. rept DRILLER'S LOG accuracy 3

Depth cased: 1623 ft Casing type: STEEL Diam. 12 1/2 in

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

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

Date Drilled: MARCH 1930 Pump intake setting: 930 ft

Driller: THORPE WELL CO. DES MOINES, IA.

Lift (type): (A) air, (B) bucket, (C) cent, (J) multiple, (L) multiple, (M) multiple, (N) none, (P) piston, (R) rot, (S) submerg, (T) turb, (V) other, (W) other, (X) other, (Y) other, (Z) other

Power (type): (A) diesel, (B) elec, (C) gas, (D) gasoline, (E) hand, (F) gas, (G) wind, (H) H.P., (I) Trans. or meter no.

Descript. MP LSD ft above LSD. Alt. MP 887

Alt. LSD: 887 Accuracy: ALTIMETER

Water Level: 110 ft above MP; Ft below LSD 110 Accuracy: DRILLER'S LOG

Date mea: MARCH 1930 Yield: 300 gpm Method determined 0

Drawdown: 40 ft Accuracy: 3 Pumping period 0 hrs

QUALITY OF WATER DATA: Iron 0 ppm Sulfate 1951 ppm Chloride 136 ppm Hard. 3 ppm

Sp. Conduct 0 K x 10⁶ Temp. 0 °F Date sampled AUG 28, 1930

Taste, color, etc. HIGHLY MINERALIZED.

Punched ERC

Verified FCH

Well No. 077-16W-13 CAAA

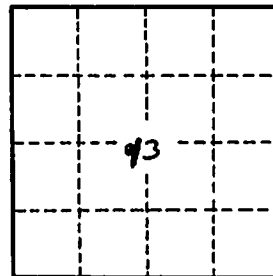
Well No. 077-16W-13CAALatitude-longitude 41, 28, 15 ^N 092, 39, 05.1
d m s d m s

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD
 Physiographic Province: CENTRAL LOWLAND 12 Section: DISSECTED
 TILL PLAIN E Drainage Basin: SKUNK 25C Subbasin:
 (D) (C) (E) (F) (H) (K) (L)
 Topo of well site: depression, stream channel, dunes, flat, hilltop, sink, swamp,
 (O) (P) (S) (T) (U) (V)
 offshore, pediment, hillside, terrace, undulating, valley flat
 MAJOR
 AQUIFER: CAMBRIAN UPPER C3 JORDAN SS. 5J
 system series aquifer, formation, group
 Lithology: MEDIUM SANDSTONE 3V Origin: MARINE 6 Aquifer Thickness: 44 ft
 Length of well open to: 44 ft Depth to top of: 2086 ft 44
 MINOR
 AQUIFER: ORDOVICIAN LOWER Q1 PRAIRIE DU CHIEN L1P
 system series aquifer, formation, group
 Lithology: CHESTNUT DOL., LS. & SS Q1D Origin: MARINE 6 Aquifer Thickness: 463 ft
 Length of well open to: 463 ft Depth to top of: 1623 ft 463
 Intervals Screened: NONE
 Depth to consolidated rock: 135 ft 135 Source of data: DRILLER'S LOG D
 Depth to basement: ft Source of data:
 Surficial material: YELLOW CLAY P Infiltration characteristics: POOR 4
 Coefficient Trans: gpd/ft Coefficient Storage:
 Coefficient Perm: gpd/ft² Spec cap: 7.5 gpm/ft; Number of geologic cards:

CASING:

12 1/2" PIPE 0 - 301' 9"
 10" PIPE 278' - 829'
 8" PIPE 1043' 6" TO 1160'
 6" PIPE 791' - 1635'
 4" PIPE 1553' - 2139



WELL PERFORATED TO OPEN JORDAN & PRAIRIE DU CHIEN.

HIGH MINERALIZATION CAUSED ABANDONMENT OF WELL IN 1930.

Well No. 077-16W-13CAA

THORPE BROTHERS WELL COMPANY

2340 Sixth Avenue
DES MOINES, IOWA

W-0212

Drilled for Town of New Sharon at New Sharon

Drilling started April 3 19 29 Completed March 19 30

Well No. 4 Kind of Well Drilled Depth 2139 Size hole started 16 in.

Finish 6 G. P. M. 300 Static head 110 Drawdown 40

Water was first encountered at 135 in grey sandstone Approximate Amount 15 gal. per min.

Remarks _____

RECORD OF PERMANENT PIPE					TEMPORARY PIPE	
SIZE PIPE	AMOUNT OF PIPE	DEPTH TO BOTTOM OF PIPE	DEPTH TO TOP OF PIPE	MAKE OF PIPE	SIZE PIPE	AMOUNT
16"	132				16"	132
12 1/2"	303	301-9	top			
10"	555	829	278			
8"	116' 3"	1160	1043-6"			
6"	844'	1635	791			
4"	526	2139	1553			

Driller R. R. Peters From Surface to _____ feet

Driller R. Quinn From _____ feet to _____ feet

Driller _____ From _____ feet to _____ feet

AMOUNT IN FEET	KIND OF SOIL OR FORMATION	TOTAL DEPTH FEET
3 ft.	Black Soil	3 ft.
12 "	Yellow Clay	15 "
12 "	Yellow Sandy Mud	27 "
14 "	Yellow Clay	41 "
63 "	Yellow Sand Muddy	104 "
8 "	Course Gravel	112 "
23 "	Sandy Clay	135 "
22 "	Grey Sandstone (little water)	157 "
10 "	Coal Blossom	167 "
13 "	Grey Shale	180 "
9 "	Red Shale	189 "
41 "	Grey Shale	230 "
27 "	Grey Lime Stone	257 "
4 "	Blue Shale	261 "
28 "	Grey Lime Stone	289 "
9 "	Black & Grey Shale	298 "

Pleist (?)
Penna (?)

(continued)

AMOUNT IN FEET	Kind of Soil or Formation	Total Depth Feet
46 "	Grey Lime Stone	344 ft. Miss (?)
3 "	Blue Shale	347 "
90 "	White Lime Stone	437 "
11 "	Blue Shale	448 "
15 "	White Lime Stone	463 "
94 "	Blue Shale	557 "
18 "	White Lime Stone	575 "
20 "	Blue Shale	595 "
8 "	White Lime Stone	603 "
22 "	Grey & Blue Shale	625 "
5 "	Grey Lime Stone	630 "
85 "	Grey Shale	715 "
5 "	Grey Lime	720 "
5 "	Grey Shale	725 "
352 "	White Lime Stone	1077 "
4 "	Grey Shale	1081 "
15 "	Grey Lime Stone	1096 "
259 "	Mixed Shale--Blue & Gray	1355 " >
186 "	Grey Lime Stone	1541 "
8 "	Blue Shale	1549 "
41 "	Grey Lime	1590 "
33 "	St. Peter Sand Stone--Hard & Fine ✓	1623 "
132 "	Grey Lime Stone--Hard	1755 "
35 "	Crevice--no samples	1790 "
85 "	Soft Sandstone Light very fine-- Richmond.	1875 "
60 "	White Lime--Sandy	1935 "
15 "	Crevice--no samples	1950 "
20 "	Sandy Lime--Brown	1970 "
20 "	Crevice--no samples	1990 "
5 "	Brown Lime	1995 "
65 "	Crevice in Brown Lime--no sample	2060 "
26 "	Brown Lime	2086 "
47 "	Jordan Sand Stone	2133 "
6 "	Grey Lime	2139 "

New Sharon, Iowa

Sample range: 1660-1760; 1780-1840;
1850-1900; 1920-1935; 1950-1960;
1980-2086; 2100-2139

In general the sample interval is 10'

No. Samples 44.

077-16W-13

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

W-0212

RECORD OF WELL

Location:

	13	
	0	

Town: New Sharon (N E)
(S W) : County Marshall

NE/4 SW sec. 13 T 77 N., R. 16 W. Prarie Twp.

Well name and number City Well (1930)

Owner _____ Address _____

Tenant _____ Address _____

Contractor Thorpe Bros Well Co. Address Des MoinesDrillers R.R. Peters & R. QuinnDrilling dates April 3, 1929 to March 1930

Well data:

Elevations: Drilling curb 822 feet; Land surface 887 feet

Determined by _____

Topographic position _____

Total depth: Reported 2139 feet, Measured _____ feetDrilling method cable

Hole and casing data 303' of 12 1/2" pipe from 0-301'9"; 555' of 10"
from 278'-829'; 116'3" of 8" pipe from 104'3"6" to 1160';
844' of 6" pipe from 791-1645'; 526' of 4" pipe from
1553 to 2139

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

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

Sources of water: Principal _____; Others _____

Production data:

Date _____

Static depth to water 110 Measuring point _____Pumping level 150 at 300 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 ₂ O ₃ + Mn ₂ O ₃ + Al ₂ O 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 1666-2139 No. spls. 43 No. dupls. & cond. 28 P-6

Spls. prepared by _____ Washed range _____ by _____

Driller's log and cond. _____

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

Microscopic study Guy strip log GuyGen. log _____ Correl. by Guy