7½' Ft Dodge South Quad
42 30 430 - 094 12 04 - 01
89 - 28 W - 19 BDBB
1980/ field located by D. Koester

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

W13068

Location:

Town: FORT DODGE (NE) (SW) (E) County WEBSTER

NEAR C/NW sec. 19 T. 89 N., R. 28 (W) Twp.

Well name and number

Owner FORT DODGE CITY WELL #16 Address

Tenant Address

Contractor THORPE WELL CO. Address DES MOINES, IOWA

Drillers

Drilling dates AUG. 1, 1961 - APRIL 1962

Well data:
Altitudes: Drilling curb feet; Land surface feet 983

Determined by

Topographic position

Total depth: Reported 1830' feet; Measured feet

Drilling method CABLE TOOLS

Hole and casing data

Original depth to water above ft. below Date

Source of data

Sources of water: Principal PRAIRIE du CHIEN, JORDAN, ST. LAWRENCE

Others

PRODUCTION DATA

AWOI

Date

Static water level 30'

Pumping water level 250'

Yield (g.p.m.) 1100 ± INFORMATION FROM TOM TROPP

Measuring point

Duration of pumping

Specific capacity

LABORATORY DATA

TL4-345; TL4-346; TL4-347; TL4-348; TL4-349

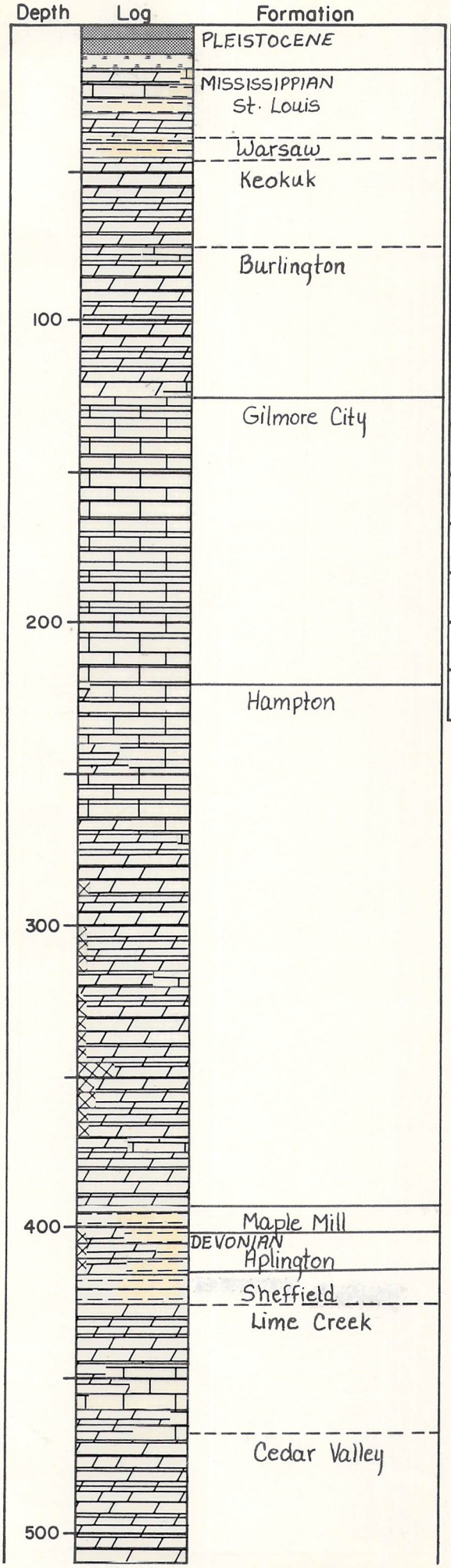
Well No. W13068 Sample range 0-1830' No. of samples

No. of dupls. and cond. Washed range

Samples prepared by Date

Logged by NORTHUP Date 1961-1962

Correlations by " Date

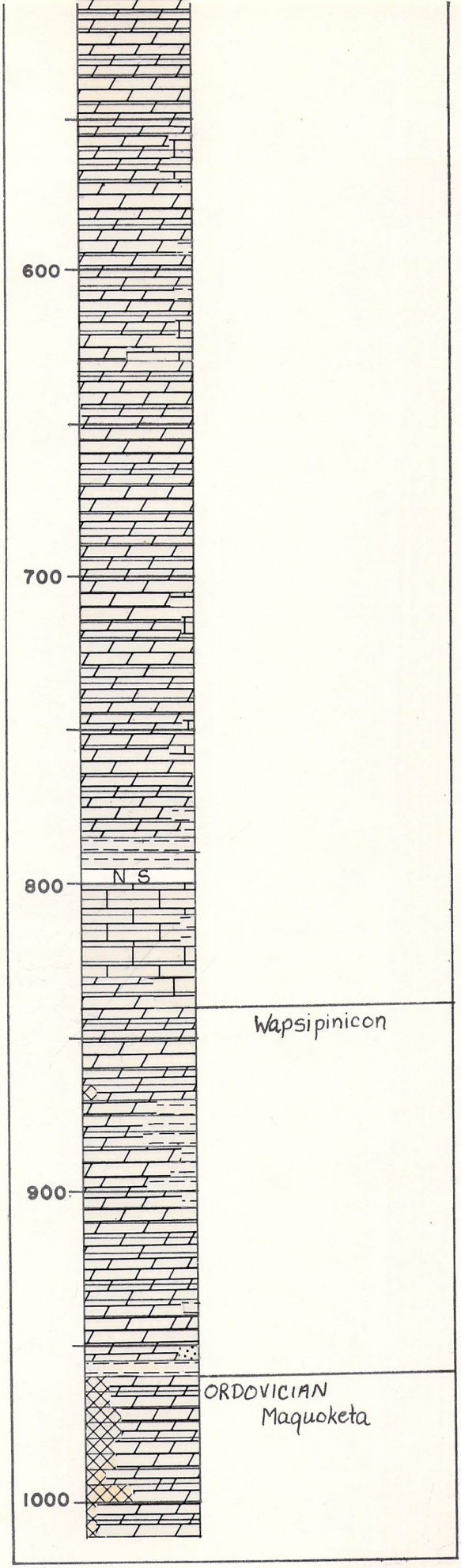


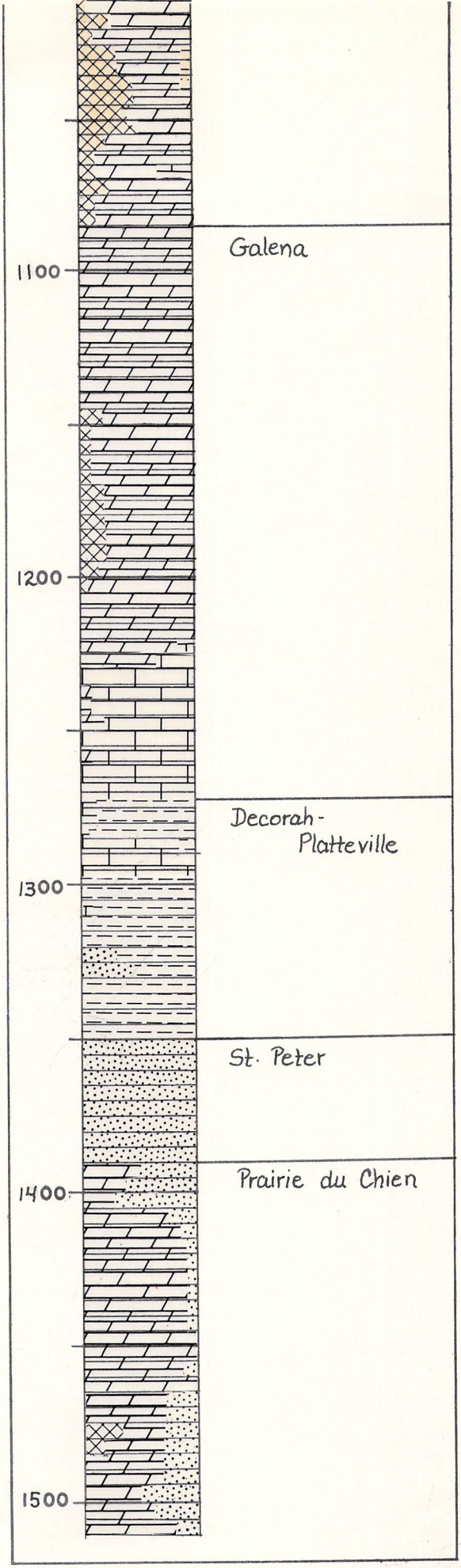
IOWA GEOLOGICAL SURVEY
In Cooperation with
U. S. GEOLOGICAL SURVEY
Iowa City, Iowa

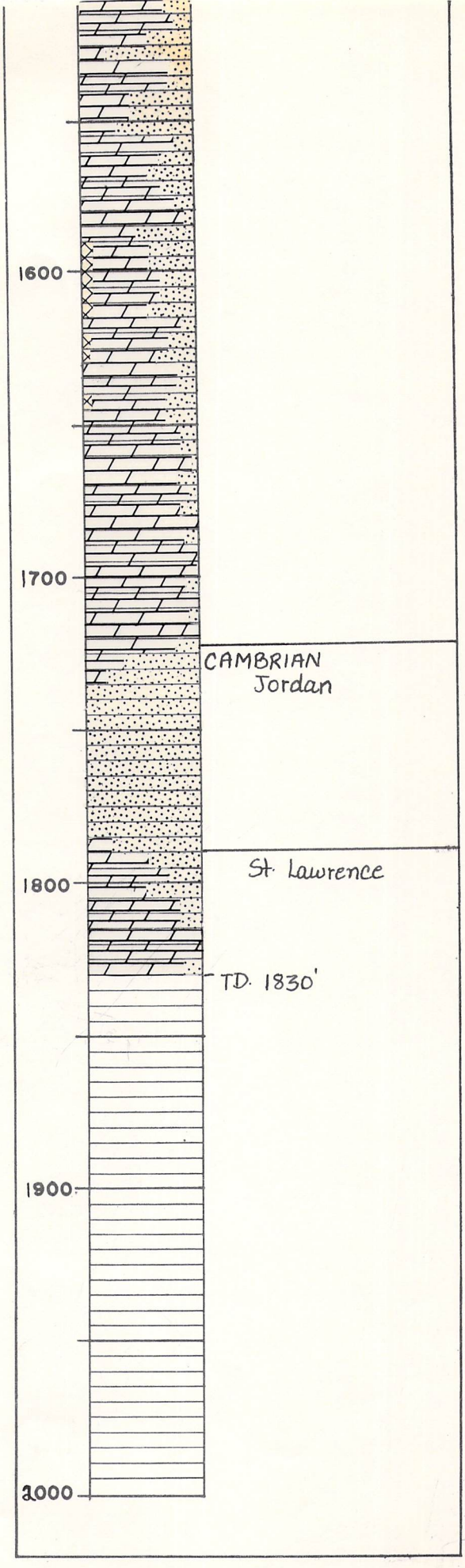
Name: Fort Dodge City Well #16	State: Iowa
Town: Fort Dodge County: Webster	Loc.: Near c/NW
Contractor: Thorpe Well Co. Driller:	Sec.: 19
Drilling Dates: Aug. 1961 - April 1962	T. 89 N., R. 28 W.
Casing Record: Cased from surface into top of Prairie du Chien	
S.W.L. 30 G.P.M. 1100 D.D. 220	
Remarks:	Elev.: 983'
	T.D.: 1830'
Logged By: Northup	I.G.S. No.: W-13068

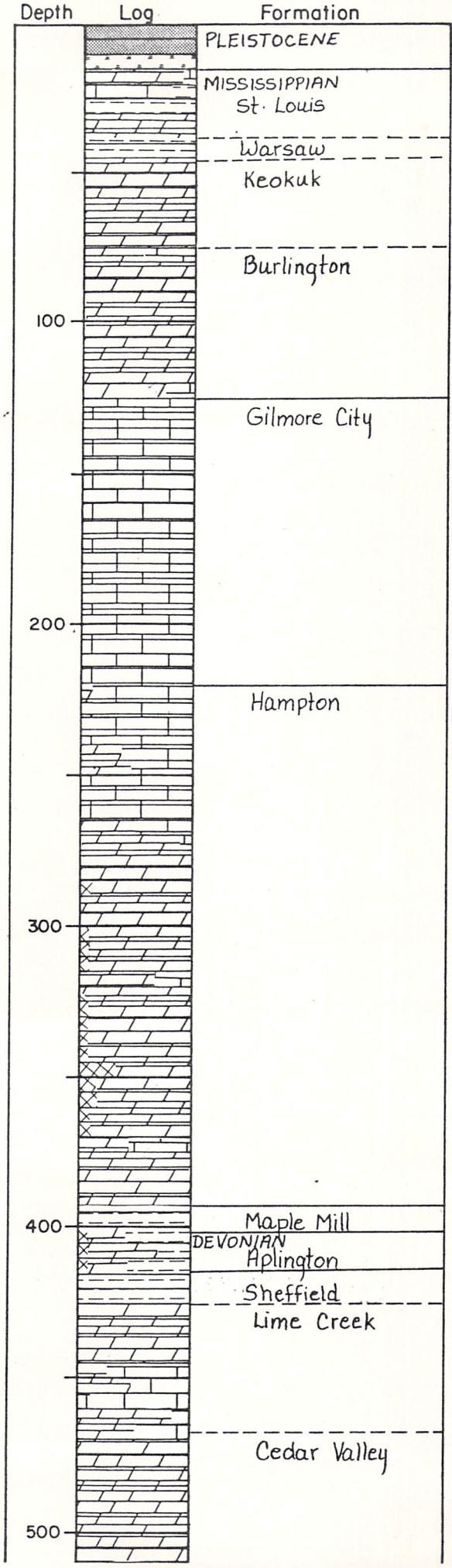
Explanation of Colors

- Soil
- Loess, Silt or Siltstone
- Drift
- Sand & Gravel
- Shale
- Sandstone
- Limestone
- Dolomite
- Chert
- Gypsum or Anhydrite
- NIS No Samples


600
700
800
900
1000
N S
Wapsipinicon
ORDOVICIAN
Maquoketa


1100
1200
1300
1400
1500
Galena
Decorah-
Platteville
St. Peter
Prairie du Chien


1600
1700
CAMBRIAN
Jordan
St. Lawrence
1800
TD. 1830'
1900
2000

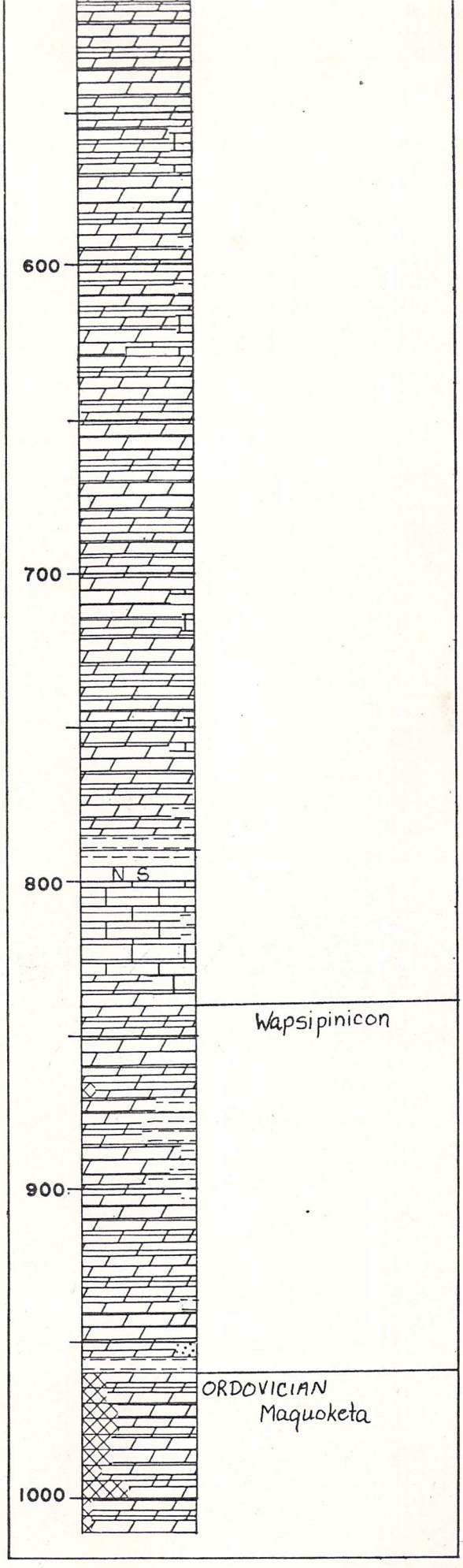


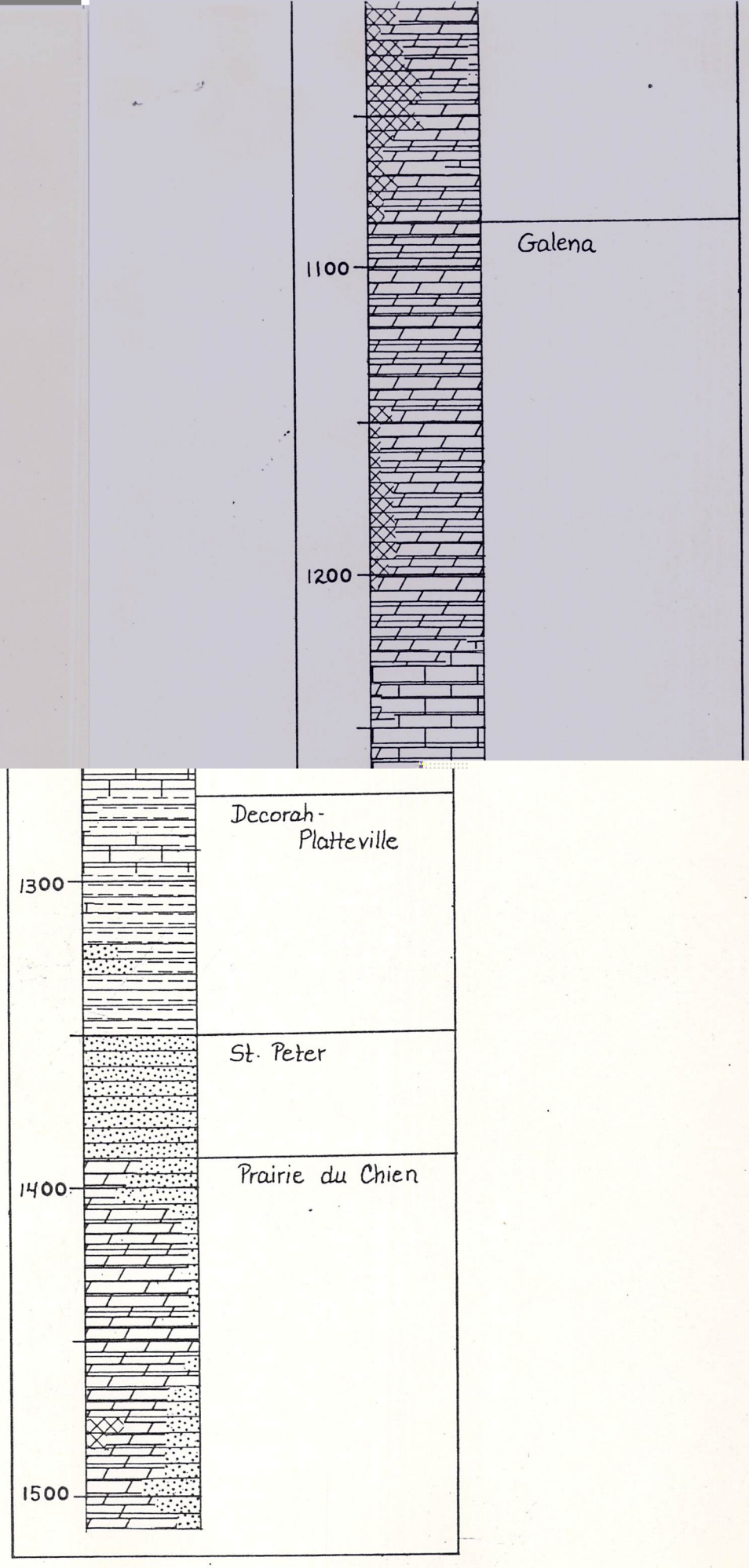
IOWA GEOLOGICAL SURVEY
In Cooperation with
U. S. GEOLOGICAL SURVEY
Iowa City, Iowa

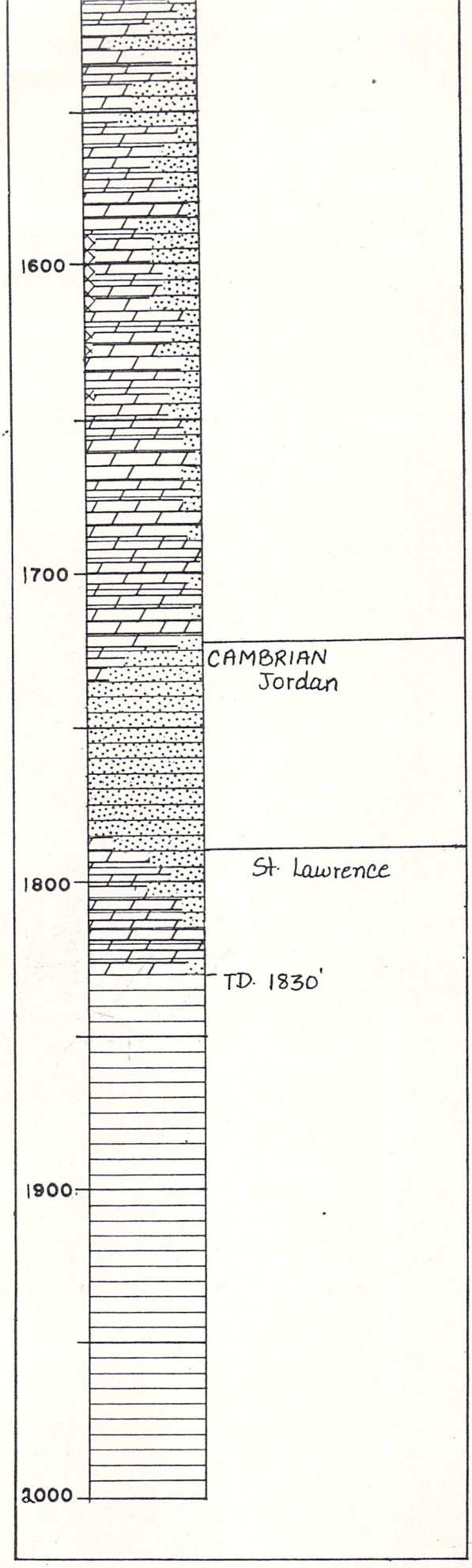
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Town: Fort Dodge County: Webster	Loc.: Near c/NW
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S.W.L. 30 G.P.M. 1100 D.D. 220	
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Explanation of Colors

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- Shale
- Sandstone
- Limestone
- Dolomite
- Chert
- Gypsum or Anhydrite
- N!S No Samples


600
700
800
N S
Wapsipinicon
900
ORDOVICIAN
Maquoketa
1000


Galena
1100
1200
Decorah-
Platteville
1300
St. Peter
Prairie du Chien
1400
1500


1600
1700
CAMBRIAN
Jordan
St. Lawrence
1800
TD. 1830'
1900
2000

Fw web Co -
#16 well

June 29, 1962

Mr. John W. Pray, Manager
City of Fort Dodge
Dept. of Municipal Utilities
Fort Dodge, Iowa

Dear Mr. Pray:

We have completed the examination of well cuttings from the Fort Dodge city well # 16.

A copy of our geologic log is being sent to you under separate cover for your files.

Very truly yours,

H. G. Hershey

HGH/bjm

G-W file
Ft. Dodge (Webster)

November 1, 1961

MEMO

TO: Dr. H. G. Hershey
FROM: Richard C. Northup
RE: Status of New Fort Dodge City Well

Mr. Atchison at Thorpe Well Company, Des Moines, phoned Wednesday morning to inquire further about the new Fort Dodge well No.16. Samples have now been received to a depth of 845' in the Wapsipinicon. Contract depth for the well is 1000' unless the city decides to go deeper, so they are anxious to know where they are in the section. They have been interested in the correlation between the section encountered in the new well and those in the old Cargill well and the Fort Dodge City wells Nos. 14 and 15. Mr. Atchison is trying to work up a cross section of the area and will send us a copy. I am not sure just what he is trying to prove, though possibly they may be trying to convince the city that the well should be carried on down to the Jordan.

noted HGH

G. R. Webster Co.

November 29, 1961

MEMO

TO: Dr. H. G. Hershey
FROM: Richard C. Northup
RE: Fort Dodge City Well

The new Fort Dodge city well #16 has reached a depth of 1160' in the Galena Dolomite, which was reached at 1085'. Mr. Atchison of Thorpe Well Company phoned this morning to check on where they are in the section. He reports a static head of 19' and says they may run a pumping test soon. The samples are being sent in from Fort Dodge at approximately 50' at a time, being taken at five foot intervals. Mr. Atchison says they will continue to send them in this way.

noted dlbtd 12/29/61

Tom also reported that the Fort Dodge # 16 well made 1100# g.p.m. on pumping test. Static water level was 30' and pumping level 250'. There was no interference with well # 15, Tom said and the total hardness is ~~shortly~~ slightly lower than # 15 - chloride also is very low. They are now trying to develop the well further to try for a greater specific capacity.

GW Ft. Dodge City No. 16

This note from R. C. Northup soon after #16 was finished

The Fort Dodge city well #16, which was started last August, has been reamed for the past three months or so, and actual deepen drilling has just recently been resumed. Our last samples are from a depth of 1200' in the Prosser, and Tom reports that they are currently drilling in the St. Peter (at about 1350'). They will drill through the St. Peter and probably 50' or so into the Prairie du Chien, where they will set and cement casing, before drilling ahead to the Jordan. Tom will see that we get the samples soon, and I would guess that Mr. Atchison, ~~Town~~ THEIR Drilling Superintendent, will call us before long.

G-W File
Ft. Dodge City
Website log
G.D.

RCN:ib
Noted: H.GH 3/14/67
EAS 3/14/67

089-28W-19 BDBBB

WRD Exp. (GW)
Aug. 1964

Punched FCH

Verified ERC

U. S. DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Water Resources Division Well Schedule Form

MASTER CARD

Record by D. AARONSON Source of data FILE Date 1/24/66 Map FT. DODGE, QUAD. 1:62,500

State IOWA 16 County (or town) WEBSTER 94

Latitude: 42 30 43 N Longitude: 094 12 04 Sequential number: 1

Lat-long accuracy: 2 T 89 N S, R 28 E W Sec 19, NWNW ¼, NWSE ¼, NW ¼ 5

Local well number: 089/28W/19BDBBB Other number: W-13068 B & M

Local use: 13068 CITY 16 Owner or name: CITY WELL #16

Owner or name: FT DODGE Address: FT. DODGE, 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) (I) (N) Dom, Irr, 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 3 Freq. W/L meas.: INVENTORY Ø Field aquifer char.

Hyd. lab. data:

Qual. water data; type: COMPLETE — C

Freq. sampling: ORIGINAL Ø Pumpage inventory: yes / no, period:

Aperture cards: yes

Log data: GEOLOGIST LOG — G

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 1830 ft 1830 Meas. (rept) accuracy — 6

Depth cased: (first perf.) ft Casing type: STEEL; Diam. 12 ? in

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

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: AUG 1961 - APR 1962 962 Pump intake setting: ft

Driller: THORPE WELL CO., DES MOINES, IA.

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, gas, gasoline, hand, nat gas, LPG, wind; H.P. Trans. or meter no.

Descrip. MP LSD ft above/below lsd, Alt. MP 983

Alt. LSD: 983 983 Accuracy: (source) ALTIMETER — 7

Water Level 30 ft above/below MP; Ft above/below lsd 30 Accuracy: DRILLER'S LOG — D

Date meas: APRIL 1962 4 6 2 Yield: 1100 gpm 1100 Method determined

Drawdown: 220 ft 220 Accuracy: 3 Pumping period hrs

QUALITY OF WATER DATA: Iron .26 ppm 2 Sulfate 237 ppm 6 Chloride 235 ppm 3 Hard. 445 ppm 7

Sp. Conduct 1180 K x 10^6 5 Temp. 61 °F 61 Date sampled 2/19/63 263

Taste, color, etc.

Well Number 42 30 43 N S 094 12 04 (d m s d m s)

HYDROGEOLOGIC CARD

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

LAKE B Drainage Basin: DES MOINES 25B Subbasin:

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

MAJOR AQUIFER: CAMBRIAN system, UPPER series C3 JORDAN SANDSTONE aquifer, formation, group SJ

Lithology: MEDIUM SANDSTONE 2V Origin: MARINE 6 Aquifer Thickness: 67 ft

67 Length of well open to: 67? ft Depth to top of: 1722.5 ft A72

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: 15 ft 15 Source of data: WELL CUTTINGS C

Depth to basement: ft Source of data:

Surficial material: SANDY TILL ST Infiltration characteristics: FAIR 3

Coefficient Trans: gpd/ft Coefficient Storage:

Coefficient Perm: gpd/ft²; Spec cap: 5 gpm/ft; Number of geologic cards:

CASING: NO INFORMATION

TEMPORARY CASING
454' OF 12" CSG.
14" LINER 1250 THRU. ST. PETER.

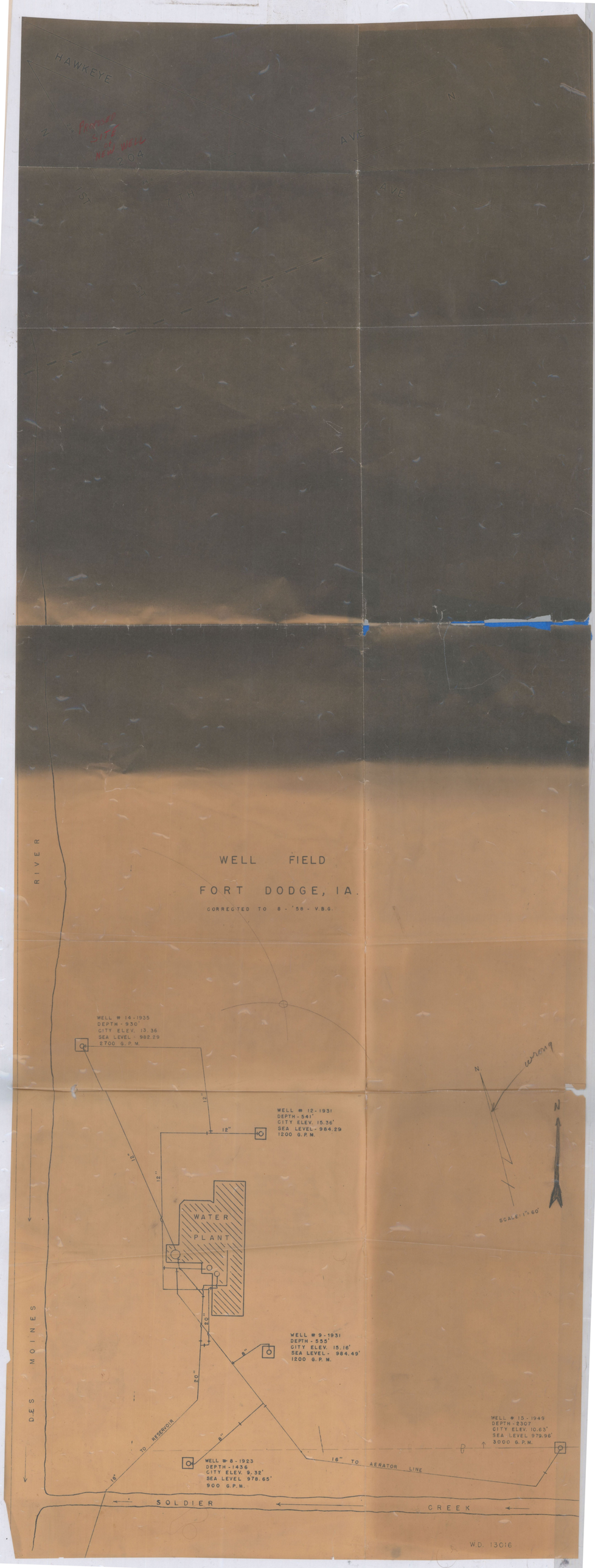
19

GPO 844-225

MAP OF
FORT DODGE
IOWA

1961

LITHO IN U.S.A. MESSENGER PRINTING CO., FORT DODGE, IOWA


HAWKEYE
AVE
N
Proposed Site New Well
204
ST
7TH
AVE
RIVER
WELL FIELD
FORT DODGE, IA.
CORRECTED TO 8 - '58 - V.B.G.
WELL # 14 - 1935
DEPTH - 930'
CITY ELEV. 13.36
SEA LEVEL - 982.29
2700 G.P.M.
WELL # 12 - 1931
DEPTH - 541'
CITY ELEV. 15.36'
SEA LEVEL - 984.29
1200 G.P.M.
12"
12"
24"
12"
WATER
PLANT
20"
8"
20"
WELL # 9 - 1931
DEPTH - 535'
CITY ELEV. 15.16'
SEA LEVEL - 984.49'
1200 G.P.M.
N.
arrow
N
SCALE: 1" = 60'
DES MOINES
TO RESERVOIR
18"
8"
WELL # 8 - 1923
DEPTH - 1436
CITY ELEV. 9.32'
SEA LEVEL 978.65'
900 G.P.M.
16" TO AERATOR LINE
WELL # 15 - 1949
DEPTH - 2307
CITY ELEV. 10.63'
SEA LEVEL 979.96'
3000 G.P.M.
SOLDIER
CREEK
W.D. 13016