

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

W-1398

RECORD OF WELL

Location:

	25	

Town: Carroll (NE)
(SW): County Carroll
SW 1/4 SE 1/4 sec. 25 T 84 N., R. 35 W. Maple River Twp.

Well name and number City of Carroll No. 6

Owner City of Carroll Address _____

Tenant _____ Address _____

Contractor Thorpe Well Co. Address _____

Drillers Chas. Spiker

Drilling dates started 8-13-39 Finished 12/13/39

Well data:

Elevations: Drilling curb 1240 feet; Land surface 1245 feet

Determined by Alt - D. Ross - 49

Topographic position Valley

Total depth: Reported 153' feet, Measured _____ feet

Was drilled to 191 feet but filled back to 153 feet.

Drilling method Cable tool

Hole and casing data 108.5' of 20-inch pipe from +1 foot to 107.5 feet.

50' of 20" screen set at 153 feet. (screen has 1 1/2" x 3/4" slots drilled 45 feet, top 5 feet blank.)

Original depth to water 40 ^{above} ft. below curb Date 1939

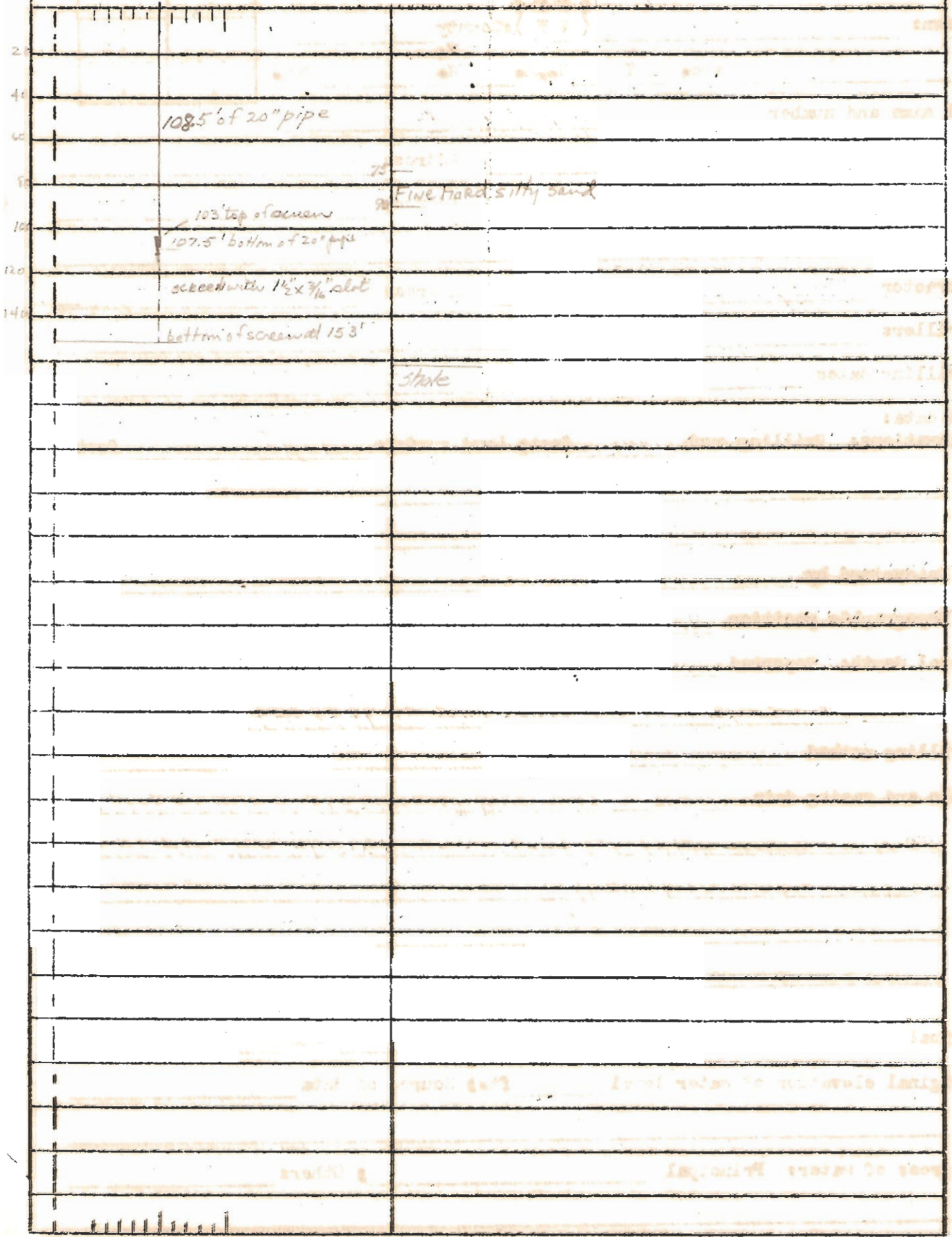
Original elevation of water level _____ ft.; Source of data _____

Sources of water: Principal _____; Others _____

CASING DIAGRAM

LOG

Vertical scale _____



Production data:

Date 1939

Static depth to water 40 Measuring point _____

Pumping level 128 at 700 gpm g.p.m.

Specific capacity 7.95 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 _____

Fe₂O₃ + Mn₂O₃ + Al₂O₃ _____

Alkali as sodium _____

Calcium _____

Magnesium _____

Iron (unfiltered) _____

Manganese _____

Nitrate _____

Fluoride _____

Chloride _____

Sulfate _____

Bicarbonate _____

Hardness (ppm) _____

Hardness (SPG) _____

Remarks _____

Laboratory data:

Sample storage location WT 3-2

Sample range 90-160 No. sps. _____ No. dupls. & cond. 14 Good

Spis. prepared by Carr Washed range _____ by _____

Driller's log and cond. _____

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

Microscopic study _____ strip log ES

Gen. log _____ Correl. by ES

UNITED STATES DEPARTMENT OF THE INTERIOR

Geological Survey
Water Resources Division

Local Well No. 084-35W-25BDDC

Aquifer Code(s) KIDI

Water Quality
(ppm)

Owner's Name CARROLL CITY#6 (1939)

W Number 01398

Card Q

State: Iowa 1 2 19 County: CARROLL 3 4 14 Town: CARROLL, IOWA

Well No. Latitude 420325N Longitude 0945215 Seq. No. 2 Date M D Y 071956

Sampling Depth Type 1 Kx10⁸ 629 pH 7.8 Temp. °F 52

SiO₂ Ca 95 Mg 26 Na 11 K 2.5

HCO₃ CO₃ 0 SO₄ 58 Cl 3.5 Source No. 3 Q

Card R

Duplicate Columns 1-25 from Card Q

F NO₃ 1.3 PO₄ B Al Fe 0.5

Mn Cu Pb Zn

Determined Solids Calc. Ca, Mg 347 Hardness Non-Carb. 47

Color No. R

Card S

Duplicate Columns 1-25 from Card Q

Br I Alk. as CaCO₃ 300 Free CO₂ SAR 1

RSC ABS Ra U

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

No. S
80

Recorded by: D. AARONSON

Punched by: _____ Date: _____

Published: _____

WRD Exp. (GM)
Aug. 1964

Verified PMJ

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 7/9/65 Map 1:63,360

State IOWA County (or town) CARROLL 1 6 1 4

Latitude: 42° 03' 25" N Longitude: 094° 52' 15" W Sequential number: 2

Lat-long accuracy: 2 T. 84 S. R. 35 Sec. 25 SW/4 & SE/4, NW 1/4

Local well number: 08435W256ddc Other number: W-1398

Local use: 01398 39 CITY 6 Owner or name: CARROLL CITY #6

Owner or name: CARROLL IOWA Address: CARROLL, IOWA

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

Use of water: Air cond, Comm, Dewatering, Fire, Dom, Irr, Ind, P-S, Stock, Instit, Unused P

Use of well: Anode, Drain, Seismic, Obs, Oil-gas, Recharge, Spring, 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 Pumpage inventory: yes 0 no, period: 0

Aperture cards: 0 yes 0

Log data: GEOLOGIST LOG - DRILLER'S LOG 6 D

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 153 ft 1 5 3 Meas. 6

Depth cased: 107.5 ft 1 0 8 Casing type: STEEL ; Diam. 20 in 2 0

Finish: porous gravel w. gravel w. horiz. open perf., screen, sd. pt., shored, open hole, other 5

Method: air bored, cable, dug, hyd jetted, air reverse trenching, driven, drive wash, other C

Date Drilled: 12-1939 9 3 9 Pump intake setting: 0 ft 0 0

Driller: THORPE WELL CO. (CHAS. SPIKER) DES MOINES, IA.

Lift (type): (A) bucket, cent. jet, (B) multiple, (C) multiple, (D) multiple, (E) multiple, (F) multiple, (G) multiple, (H) multiple, (I) multiple, (J) multiple, (K) multiple, (L) multiple, (M) multiple, (N) multiple, (O) multiple, (P) multiple, (Q) multiple, (R) multiple, (S) multiple, (T) multiple, (U) multiple, (V) multiple, (W) multiple, (X) multiple, (Y) multiple, (Z) multiple 0

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

Descrip. MP LSD 0 ft (above/below) lsd, Alt. MP 1245

Alt. LSD: 1245 1 2 4 5 Accuracy: (source) ALTIMETER 7

Water Level 40 ft above/below MP; Ft below lsd 40 Accuracy: REPORTED 6

Date meas: 1939 3 9 Yield: 700 gpm 7 0 0 Method determined 6

Drawdown: 88 ft 8 8 Accuracy: REP. 6 Pumping period 0 hrs 0 0

QUALITY OF WATER DATA: Iron 0.10 ppm 2 Sulfate 30.0 ppm 2 Chloride 0.5 ppm 0 Hard. 316 ppm 7

Sp. Conduct 602 K x 10⁶ 4 Temp. 51.8 °F 5 2 Date sampled 7/26/60 7 6 0

Taste, color, etc. 0

089-35W-25 bddc

Well Number 42 03 25 ^N 09452 15 _S

HYDROGEOLOGIC CARD

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

TILL PLAIN E Drainage Basin: RACCOON 2 5 A Subbasin: 26

Topo of well site: local depression, flat surface, hilltop, hillside, terrace, valley flat, VALLEY FLAT 27 V

MAJOR AQUIFER: CRETACEOUS LOWER K I I DAKOTA SANDSTONE D I I aquifer, formation, group 30 31

Lithology: FINE SANDST 2 V Origin: MARINE 6 Aquifer Thickness: 70 ft

Length of well open to: 8 ft 36 40 Depth to top of: 145 ft 41 43

MINOR AQUIFER: QUATERNARY P L W I Q G aquifer, formation, group 46 47

Lithology: 4 R Origin: 0 Aquifer Thickness: 70 ft

Length of well open to: 37 ft 54 56 Depth to top of: 75 ft 57 59

Intervals Screened: 107.5' - 153'

Depth to consolidated rock: 145 ft 40 43 Source of data: WELL CUTTINGS 64 C

Depth to basement: ft 65 68 Source of data: 69

Surficial material: CLAYEY TILL 6 T Infiltration characteristics: POOR 72 A

Coefficient Trans: gpd/ft 73 75 Coefficient Storage: 76 78

Perm: gpd/ft²; Spec cap: 7.95 gpm/ft; Number of geologic cards: 79

CASING:

108.5' OF 20" PIPE FROM +1 FT
TO 107.5 FT. 50' OF 20" SCREEN
SET AT 153 FEET (SCREEN HAS
1 1/2" x 3/16" SLOTS, SLOTTED 45',



TOP 5' BLANK.

TOTAL DEPTH WAS 171' - BACKFILLED TO
153'.

THIS WELL WAS REBUILT IN 1967 AND A WATER ANALYSIS (6 JAN 1970)
IS AVAILABLE. BUT NO DATA ON THE WELL CONSTRUCTION IS PRESENT IN
THE FILES.