

WRD Exp. (GW)
April 1966

Well No. 082-12W-20 CBB

WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR

GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

MASTER CARD

Record by KARSTEN Source of data FILE Date 6/24/69 Map BENTON CO. NWY

State 10WA County 16 (or town) BENTON 06

Latitude: 41 53 52 N Longitude: 09 21 64 4 Sequential number: 1

Lat-long accuracy: 2 T. R2 S. R. 12 Sec 20, NW 1/4, NW 1/4, SW 1/4 5

Local well number: 08212W20CBB Other well number: W-0105

Local use: 00105 Owner or name: BELLE PLAIN CITY #1

Owner or name: BELLE PLAINE I Address: BELLE PLAIN, IA.

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: U

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

DATA AVAILABLE: Well data 5 Freq. W/L meas.: N Field aquifer char. 72

Hyd. lab. data: 73

Qual. water data; type: P 74

Freq. sampling: I Pumpage inventory: yes 76 no; period: 77

Aperture cards: 78

Log data: GEOLOGIST 78 79

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 1503 ft Meas. 1503 accuracy 3

Depth cased: 503 ft Casing Type: STEEL; Diam. 6 in 6

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

Method Drilled: air bored, cable, dug, hyd rot., (rot.), (D) (H) (J) (P) (R) (T) (V) (W) (Z) C

Date Drilled: 1907 907 Pump intake setting: 36 ft 38

Driller: J.P. MILLER CHICAGO, ILL. address

Lift (type): air, bucket, cent, jet, multiple, (cent.), multiple, (turb.), none, piston, rot, submerg, turb, other 39 Deep 40

Power (type): diesel, elec, gas, gasoline, hand, gas, wind; H.P. 41 Trans. or meter no. 42

Descrip. MP LSD ft below LSD, Alt. MP 815

Alt. LSD: 815 Accuracy: ALT 47 7

Water Level: 42 ft above below MP; 43 ft above below LSD Accuracy: 48 51 52

Date meas: 53 55 Yield: 56 gpm 57 Method determined 58

Drawdown: 59 ft Accuracy: 60 61 Pumping period 62 hrs 63 64 65 66 67 68

QUALITY OF WATER DATA: Iron 1 4 ppm Sulfate 1247 9 ppm Chloride 9 0 ppm Hard. 1420 9

Sp. Conduct 73 K x 10⁶ Temp. 74 75 Date sampled 1910 76 77 78 79

Taste, color, etc. 80

Well No. 082-12W-20 CBB

Latitude-longitude 41 53 52 S 092 16 44
d m s d m s

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD
 Physiographic Province: CENT. LL 1 2 Section: DISJ. TILL
20 21

PLAIN E Drainage Basin: IOWA 2 5 D Subbasin: 26
22 23 25

(D) (C) (E) (F) (H) (K) (L)
 Topo of depression, stream channel, dunes, flat, hilltop, sink, swamp,
 well site: (Ø) (P) (S) (U) (T)
 offshore, pediment, hillside, terrace, undulating, valley flat 27

MAJOR AQUIFER: ORD system, LOWER series, Ø 1 aquifer, formation, group, PR. OR CHIEF 2 R
28 29 30 31

Lithology: DOL SS D V Origin: MARINE 6 Aquifer Thickness: 163 ft
32 33 34

1 6 3 Length of well open to: 38 ft 40 Depth to top of: 41 ft 43
35 37 38 40 41 43

MINOR AQUIFER: ORD system, MIO. series, Ø 2 aquifer, formation, group, ST. PETER M P
44 45 46 47

Lithology: MEN GR. SS 3 V Origin: MARINE 6 Aquifer Thickness: 70 ft
48 49 50

7 0 Length of well open to: 54 ft 56 Depth to top of: 57 ft 59
51 53 54 56 57 59

Intervals Screened: NONE

Depth to consolidated rock: 287 ft 2 8 7 Source of data: C
60 63 64

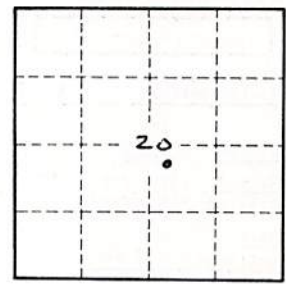
Depth to basement: 65 ft 68 Source of data: 69
65 68 69

Surficial material: NON CAL TIL N T Infiltration characteristics: POOR 4
70 71 72

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

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

CASING:
 10" - 0 - 215'
 8" TO 315'
 6" 0 - 174'
 5" TO 503'
 OPEN HOLE 503' - 1503'

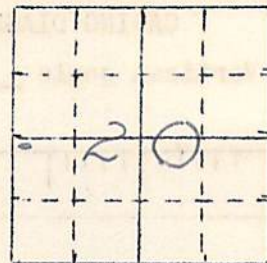


Well No. 082-12W-20 CBB

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

W-0105

RECORD OF WELL



Location:

Town: Belle Plaine (N E)
(S W); County Benton
K.
NW/4 SW 1/4 sec. 20 T. 82 N., R. 12 W. Jawa Twp.

Well name and number Belle Plaine City Well #1

Owner Town of Belle Plaine Address _____

Tenant _____ Address _____

Contractor J.P. Miller Artesian Well Co Address Chicago, Illinois

Drillers _____

Drilling dates 1906 - 1907

Well data:

Elevations: Drilling curb 810 feet; Land surface _____ feet

Determined by _____

Topographic position _____

Total depth: Reported 1503 feet, Measured 1503 feet

Drilling method _____

Hole and casing data 0-215' = 10" hole; 215'-503' = 8" hole; 503'-1300' = 6" hole; 1300'-1503' = 5" hole; 8" casing from 0-315'; 6" pipe from 0-174'; 5" pipe from 0-503'; lead pack at 503' open hole from 503'-1503'
(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 34 ft. ^{above} curb Date 1907

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

Sources of water: Principal Root Valley 1486'; Others Galena 1140'
and St Peter 1280'

Production data: Date 1908
Static depth to water 20' Measuring point 810' curb
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: 100 g.p.m. for _____ hrs. a day
Use of water Public supply

WATER ANALYSES (in parts per million)

Date sampled	_____	_____	_____	_____
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 WES
Sample range 0-1490 No. spls. _____ No. dupls. & cond. poor
Spls. prepared by _____ Washed range 0-1490 by Gulf
Driller's log and cond. Yes Vol 21 TGS p.430
Insoluble residues: Prepared by _____ Studied by _____ Strip log _____
Microscopic study Conselman; Schultz strip log Conselman 1939; Schultz Nov 1944
Gen. log _____ Correl. by Schultz

W105

Iowa Department of Natural Resources

**Abandoned Water Well
Plugging Record**

1. Owner:

PWTS Well Number:

Name: <u>Water Department</u>	City: <u>Belle Plaine</u>	State: <u>Iowa</u>
Address: <u>1207 8th Avenue</u>	Zip: <u>52208</u>	Phone: <u>(319) 444-2200</u>

If this was a Public Water Supply Well, please provide:

PWSID Name:	PWSID Number:
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2. Well (Cistern) Location:

<u>SW</u> 1/4 of, <u>NW</u> 1/4 of, <u>NW</u> 1/4 of, Section <u>20</u> , Twp. <u>82</u> N, Range <u>12</u> West/East (circle one)
<u>Benton</u> County, Describe well location on property: <u>One block South of City Hall at Station 104 & 72, 43 feet left of Center of 12th Street.</u>
GPS Well Location: Latitude _____ Longitude _____

3. Description:

Well depth: <u>?</u> ft.	Casing material: steel, plastic, concrete, clay, brick, stone (circle one)
Depth to water: <u>Flowing</u> ft.	
Casing diameter: <u>6</u> in.	Type of construction: drilled, driven, bored, dug, augered (circle one)
Year or decade constructed: <u>Early 1900's</u>	
Depth of casing: _____ ft.	Check <input type="checkbox"/> if this is a Monitoring Well Well ID _____
Check <input type="checkbox"/> if Cistern	depth: _____ ft. diameter: _____ ft.

I certify this well has been plugged as required by rule 567-39.8 of the Iowa Administrative Code (IAC). I agree to provide any additional information the county or department may need concerning this well.

Signature of Owner: Bill Daily, City Admin Date Plugged: 8-25-2011

If plugged by certified well contractor, complete this box:

I have plugged this well as required by rule 567-39.8 of the Iowa Administrative Code (IAC).
Signature of Contractor: <u>[Signature]</u> Cert. No. <u>4289</u>

OR, If plugged by well owner, complete this box:

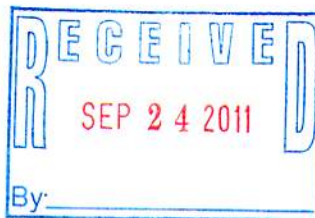
The property owner has plugged this well following requirements in rule 567-39.8 of the Iowa Administrative Code with the oversight and assistance of the designated county agent.
Signature of County Agent: _____ Date Approved: _____

Eligible for Grants-to-Counties cost share: <input type="checkbox"/> YES <input type="checkbox"/> NO (Private Wells Only - Determined by County Agent)
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Complete one form for each well plugged and submit within 30 days to the local county agent:

or, only if no county agent is available, to:

Water Supply Section Iowa Department of Natural Resources 401 SW 7 th Street, Suite M Des Moines, IA 50309-4611
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W105

Northway Well and Pump Co.
4895 8th Avenue
Marion, Iowa 52302

September 1, 2011

Note: Belle Plaine Downtown Well

This well was found by Garling Construction on the City's downtown street improvement project. The 6" well casing was four feet below grade seeping artesian water. The Iowa Department of Natural Resources and the Iowa Geological Survey Bureau were contracted in regard to the flowing well. The well was airlifted and cleaned to 5 feet below earthing or 9 feet below street grade. The material removed was sand and clay until a hard object was encountered. The well was grouted to its top elevation. At that level four bags of bentonite were placed around the subsurface area and covered with construction rock. The well was still seeping from the outside of the deteriorated casing at that time. The well is located directly South of the West entrance of the City Hall and 43 feet North of 12th Street on the North East corner next to a storm sewer line.

