WRD Exp. (GW)
April 1966

Well No. 080-12W-12AC

WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR — GEOLOGICAL SURVEY — WATER RESOURCES DIVISION

MASTER CARD

Record by D.AARONSON Source of data FILE Date 2/8/67 Map 1:63,360 COUNTY HWY.

State IOWA [16] County (or town) IOWA [48]

Latitude: 41 45 20 N Longitude: 092 11 20 Sequential number: 1

Lat-long accuracy: 3 T. 80 N, R 12 W Sec 12, ___ ¼, SW ¼, NE ¼ 5

Local well number: 080 12W 12AC Other number: B & M W-5509

Local use: 05509 52 CITY 2 Owner or name: LADORA TOWN WELL #2

Owner or name: LADORA IOWA Address: LADORA, IA.

Ownership: (C) County, (F) Fed Gov't, (M) City, (N) Corp or Co, (P) Private, (S) Agency, (W) Dist [67] M

Use of water: (A) Air cond, (B) Bottling, (C) Comm, (D) Dewater, (E) Power, (F) Fire, (H) Dom, (I) Irr, (M) Med, (N) Ind, (P) P S, (R) Rec, (S) Stock, (T) Unused, (U) Repressure, (V) Recharge, (W) Desal-P S, (X) Desal-other, (Z) Other [68] P

Use of well: (A) Anode, (D) Drain, (G) Seismic, (H) Heat Res, (O) Obs, (P) Oil-gas, (R) Recharge, (T) Test, (U) Unused, (W) Withdraw, (X) Waste, (Z) Destroyed [69] W

DATA AVAILABLE: Well data [70] 1 Freq. W/L meas.: INVENTORY [71] Ø Field aquifer char. [72]

Hyd. lab. data: [73]

Qual. water data; type: COMPLETE [74] C

Freq. sampling: IRREGULAR (7/17/52) [75] I Pumpage inventory: yes / no, period: [76]

Aperture cards: yes [77]

Log data: GEOLOGIST LOG [78 79] G

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD

Depth well: 72'6" ft [72] Meas. rept accuracy: DRILLER'S LOG [24] 3

Depth cased; (first perf.) 64'6" ft [64] Casing type: STEEL; Diam. 8 in [8]

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

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: JULY 17, 1952 [52] Pump intake setting: 50 ft [50]

Driller: D.E. EDWARDS (name), WEST BRANCH, IA. (address)

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 [T] Deep [D] Shallow

Power (type): diesel, (elec) nat gas, LP gasoline, hand, gas, wind; H.P. ___ [5] Trans. or meter no. ___

Descrip. MP LSD ft above below LSD. Alt. MP 765

Alt. LSD: 765 [7615] Accuracy: (source) ALTIMETER [7]

Water Level 19 ft above (below) MP; Ft above (below) LSD [19] Accuracy: DRILLER'S LOG [D]

Date meas: JULY 1952 [52] [752] Yield: 300 gpm [3000] Method determined [ ]

Drawdown: 21 ft [21] Accuracy: [3] Pumping period 4 hrs [04]

QUALITY OF WATER DATA: Iron 1.4 ppm [5] Sulfate 162 ppm [5] Chloride 40 ppm [0] Hard. 333 ppm [7]

Sp. Conduct 1010 K x 10^6 [5] Temp. 53 °F [53] Date sampled 9/2/59 [959]

Taste, color, etc.

Punched ERC Verified PMJ

Well No. 080-12W-12AC

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Latitude-longitude 41 d 45 m 20 s (N) 092 d 11 m 20.1 s (W)

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD [1]

Physiographic Province: CENTRAL LOWLAND [20 12] Section: DISSECTED TILL PLAIN [22 E]

Drainage Basin: IOWA [23 25 ZSD] Subbasin: [26]

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

MAJOR AQUIFER: QUATERNARY system, PLEIST series [28 29 QG] aquifer, formation, group [30 31 GX]

Lithology: SAND & GRAVEL [32 33 R] Origin: GLACIAL [34 O] Aquifer Thickness: ft

[35 37] Length of well open to: 8 ft [38 40 8] Depth to top of: 56 ft [41 43 56]

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

Lithology: [48 49] Origin: [50] Aquifer Thickness: ft

[51 53] Length of well open to: ft [54 56] Depth to top of: ft [57 59]

Intervals Screened: 64.5 FT TO 72.5 FT.

Depth to consolidated rock: ft [60 63] Source of data: [64]

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

Surficial material: NONCALC. LOESS [70 71 NQ] Infiltration characteristics: POOR [72 4]

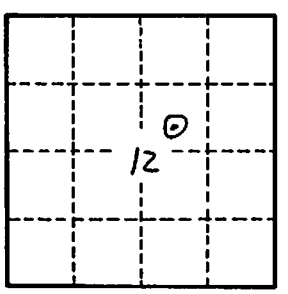
Coefficient Trans: gpd/ft [73 75] Coefficient Storage: [76 78]

Coefficient Perm: gpd/ft^2; Spec cap: 14.2 gpm/ft; Number of geologic cards: [79]

CASING:

8" CASING FROM +1.6 FT TO 64'6".

8' OF SCREEN SET ON BOTTOM WITH 3 FT. OF 7" CASING LAPPING INTO 8".



Well No. 080-12W-12 AC

GPO 857-700

Ladora

September 19, 1952

Mayor
Ladora, Iowa

Dear Sir:

Enclosed are reports on the mineral analyses of water from the 51-foot and 72½-foot wells of the Town of Ladora as shown by samples collected by Mr. C. W. Lane on July 17, 1952.

These reports do not show the sanitary condition of the wells since it is impossible to make a bacteria count from a sample such as the ones collected.

If you have any questions concerning these reports, please do not hesitate to let me hear from you.

Very truly yours,

H. G. Hershey

Enclosures

HGH:emh

Iowa

July 29, 1952

Mr. D. E. Edwards
D. E. Edwards, Inc.
West Branch, Iowa

Dear Mr. Edwards:

We have just received the State Water Laboratory report on the iron content and hardness of the two water samples collected at Ladora at the time of the pumping test. They are as follows:

Well	Fe (ppm)	Hardness (ppm)	Hardness (grains/gallon)
Old well	1.6	388	22.7
New well	1.3	360	21.0

The complete mineral analysis of the two samples should be completed in about a week and copies will be forwarded to you at that time.

Very truly yours,

C. Richard Murray

CRM:CWL:emh

Sample from 20 to 33'

which is missing was reported by the driller to be a very fluid silt and no samples were saved.

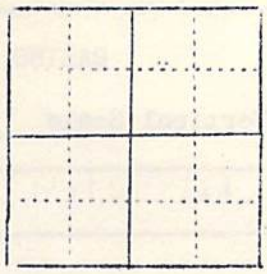
CWL

080-12W-12AC

W 5509

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

RECORD OF WELL



Location:

Town: Ladora (N E / S W) :County Iowa

SWNE sec. 12 T 80 N., R. 12 E. W. Twp.

Well name and number Ladora Town Well #2 (1952)

Owner Town of Ladora Address

Tenant Address

Contractor D.C. Edwards Address West Branch, Ia.

Drillers Joe Kuntz

Drilling dates June 16 to July 17, 1952

Well data:

Elevations: Drilling curb feet; Land surface 765 feet

Determined by

Topographic position Valley Flat

Total depth: Reported 72'6" feet, Measured feet

below top of 8" csg which is 1.6 ft above land surface

Drilling method cable tool

Hole and casing data 8" csg from +1.6 to 64'6". 8 ft of 80 slot 8" screen set on bottom with 3' of 7" csg lapping into 8"

Original depth to water ft. above / below Date

Original elevation of water level ft.; Source of data

Sources of water: Principal ; Others

Production data: Date _____

Static depth to water 19± Measuring point top of 8" Csg 1.0 above ld
Pumping level 427' 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_2O_3+Mn_2O_3+Al_2O_3				
Alkali as sodium				
Calcium				
Magnesium				
Iron (unfiltered)				
Manganese				
Nitrate				
Fluoride				
Chloride				
Sulfate				
Bicarbonate				
Hardness (ppm)				
Hardness (gpg)				

Remarks _____

Laboratory data: Sample storage location CL 6-3
Sample range 0-71.6' No. spls. 7 No. dupls. & Cond. 7- Good
Spls. prepared by AJF Washed range — by AJF 7/21/52
Driller's log and cond. _____
Insoluble residues: Prepared by _____ Studied by _____ Strip log _____
Microscopic study _____ strip log 8/1/52
Gen. log _____ Correl. by NORTHUP