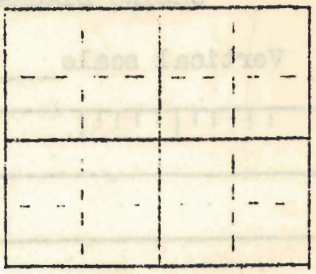
IOWA GEOLOGICAL SURVEY
In Cooperation with U. S. Geological Survey

W-4088

RECORD OF WELL



Location: 1 mi N.
Town: Anita (N E) (S W): County Cass
sec. ___ T 77 N., R. 34 W. Grant Twp.

Well name and number Anita Town Well No. 3

Owner Do Address

Tenant Address

Contractor Olson & Son Address Oakland, Nebr.

Drillers

Drilling dates 10-1-49

Well data:
Elevations: Drilling curb ____ feet; Land surface ____ feet

Determined by

Topographic position Hill

Total depth: Reported 214 feet, Measured ____ feet

Drilling method Cable

Hole and casing date 12" casing from 0 to 200'. 8" screen 200 to 214' Gravel packed between 8" & 12" pipes. Johnson screen 25 slot from 200' to 204', 45 slot from 204' to 214'.

Original depth to water 154 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 _____ Measuring point _____
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: _____ g.p.m. for _____ hrs. a day
Use of water _____

WATER ALALYSES (in parts per million)

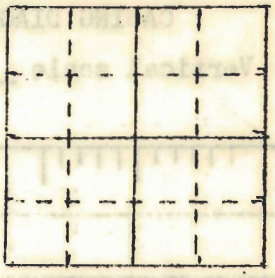
Date samples				
Sampled by				
Total solids				
Insoluble matter				
Alkalinity (Meo)				
Alkalinity (Phn)				
pH				
Fe_2O_3- Mn_2O_3-Al_2O_3				
Alkali as sodium				
Calcium				
Magnesium				
Iron (unfiltered)				
Manganese				
Nitrate				
Fluoride				
Chloraie				
Sulfate				
Bicarbonate				
Hardness (ppm)				
Hardness (gpg)				

Remarks _____

Laboratory data: Sample storage location CG6-10
Sample range 0-232± 0-220 No. spls. 26 No. dupls. & cond. 26 for -
Spls. prepared by RPC-DeRoma Washed range 200-232± by 3/20/50 DeRoma
Driller's log and cond. _____
Insoluble residues: Prepared by _____ Studied by _____ Strip log _____
Microscopic study _____ strip log _____ Rmj 3/27/50
Gen. log _____ Correl. by _____

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

RECORD OF WELL



Location:

Town: Anita (N E / S W); County Cass

prob 21 sec. ___ T. 77 N., R. 34 ~~E.~~ W. Grant Twp.

Well name and number Anita Town well #

Owner Town of Anita Address E.B. Ford

Tenant ___ Address Superintendent of utilities and waterworks

Contractor Olson & Anderson Address Oakland, Neb

Drillers ___

Drilling dates Fall 1944

Well data:

Elevations: Drilling curb ___ feet; Land surface ___ feet

Determined by ___

Topographic position ___

Total depth: Reported 228 feet, Measured ___ feet

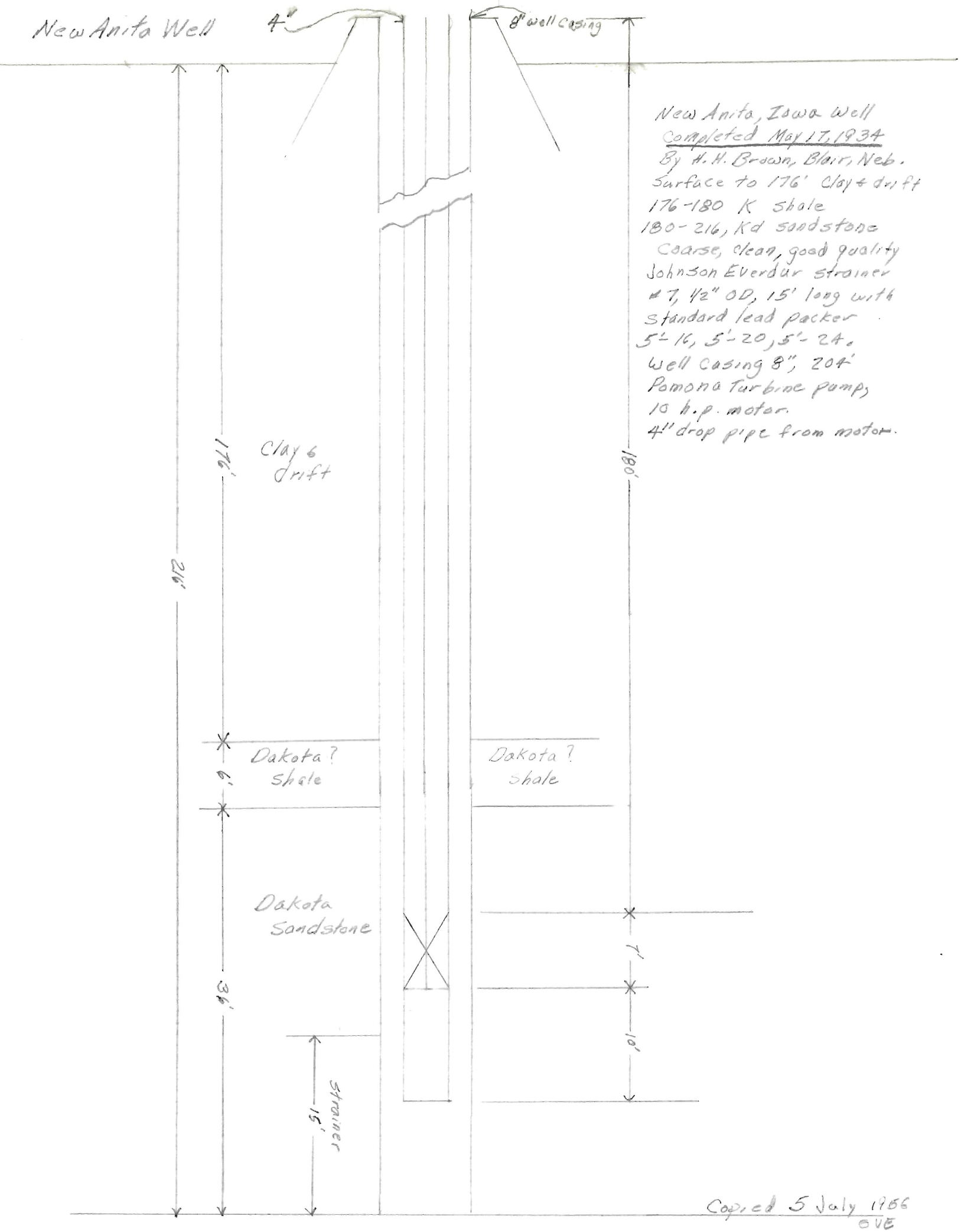
Drilling method ___

Hole and casing data 8-hole 16 ft of 8" screen from 212-228
(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 ___ ft. above / below ___ Date ___

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

Sources of water: Principal ___; Others ___



Copied 5 July 1966
EVE

W# ~~4088~~ 35486

STATE HYGIENIC LABORATORY, DES MOINES BRANCH
WATER LABORATORY DIVISION
MINERAL ANALYSIS

LAB. NO. 1283
MINERAL NO. 2606
Dec. 22 19 60

IOWA GEOLOGICAL SURVEY
DEC 27 (illegible)

TOWN Anita COUNTY Cass
OWNER OF SUPPLY Anita Municipal Utilities
COLLECTOR'S NAME Hershel McCaskey
DATE COLLECTED Nov. 30, 1960 DATE RECEIVED Dec. 1, 1960
REPORT TO: NAME Division of Public Health Engineering
ADDRESS State Department of Health

FIELD DATA

SOURCE: WELL NAME, NUMBER, POINT OF COLLECTION, DEPTH, CONSTRUCTION DATE, ETC., North Well #1. Constructed in 1943. Depth 220'

WELL PUMPED Automatic HRS. AT 90 GPM. DATE OF PREVIOUS SAMPLE Feb. 9, 1956
WAS SAMPLE FREE OF TURBIDITY WHEN COLLECTED clear
TEMPERATURE °C 30 ALKALINITY (ppm $CaCO_3$) P none T 15.60 pH
IS A POLYPHOSPHATE BEING USED? none
Iron (ppmFe) 0.05

LABORATORY ANALYSIS
(PARTS PER MILLION)

SPECIFIC CONDUCTANCE K AT 25°C 81.2 x 10^{-5}. TURBIDITY
DISSOLVED SOLIDS 542 SOLUBLE IRON (Fe) 0.05
TOTAL SOLIDS 542 SILICA (SiO_2) 22.2 TOTAL IRON (Fe) 0.05
ALKALINITY (ppm $CaCO_3$) P none T 282 pH 7.2 DATE Dec. 1, 1960

POSITIVE IONS		NEGATIVE IONS	
K+	3.7	NO_3 – asN	0.3
Na +	36.4	F –	0.6
Ca++	105	Cl –	4
Mg++	26.2	SO_4 – –	17
Mn++	0.73	HCO_3 –	344
Al+++		CO_3 – –	none

HARDNESS AS $CaCO_3$ [illegible] ppm 22.2 gpg

ANALYST hyar

R. L. MORRIS
PRINCIPAL CHEMIST

bw

WH4088

STATE HYGIENIC LABORATORY, DES MOINES BRANCH
WATER LABORATORY DIVISION
MINERAL ANALYSIS

LAB. NO. 1284
MINERAL NO. 2607
Dec. 22 19 60

TOWN Anita COUNTY Cass

IOWA GEOLOGICAL SURVEY
DEC 27

OWNER OF SUPPLY Anita Municipal Utilities
COLLECTOR'S NAME Hershel McCaskey
DATE COLLECTED Nov. 30, 1960 DATE RECEIVED Dec. 1, 1960
REPORT TO: NAME Division of Public Health Engineering
ADDRESS State Department of Health

FIELD DATA

SOURCE: WELL NAME, NUMBER, POINT OF COLLECTION, DEPTH, CONSTRUCTION DATE, ETC., South well #2, constructed in 1949. Depth 214'

WELL PUMPED Automatic HRS. AT 115 GPM. DATE OF PREVIOUS SAMPLE Feb. 9, 1956
WAS SAMPLE FREE OF TURBIDITY WHEN COLLECTED clear
TEMPERATURE °C 31 ALKALINITY (ppm $CaCO_3$) P none T 15.85 pH 7.5
IS A POLYPHOSPHATE BEING USED? none

LABORATORY ANALYSIS
(PARTS PER MILLION)

SPECIFIC CONDUCTANCE K AT 25°C 100 x 10^{-5}. TURBIDITY
DISSOLVED SOLIDS 774 SOLUBLE IRON (Fe) 0.12
TOTAL SOLIDS 774 SILICA (SiO_2) 22.8 TOTAL IRON (Fe) 0.12
ALKALINITY (ppm $CaCO_3$) P none T 290 pH 7.2 DATE Dec. 1, 1960

POSITIVE IONS		NEGATIVE IONS	
K^+	4.1	NO_3 – asN	<0.1
Na^+	51.0	F^-	0.6
Ca^{++}	148	Cl^-	2
Mg^{++}	36.5	SO_4^{--}	329
Mn^{++}	0.89	HCO_3^-	354
Al^{+++}		CO_3^{--}	none

HARDNESS AS $CaCO_3$ 520 ppm 30.4 gpg

ANALYST Ryan

R. L. MORRIS
PRINCIPAL CHEMIST

bw

UNITED STATES DEPARTMENT OF THE INTERIOR
Geological Survey
Water Resources Division

Water Quality
(ppm)

Local Well No. 077-34W-21CDD
Aquifer Code(s) KIDI
Owner's Name ANITA CITY WELL #3 (1949)
W Number 04088

Card Q

State: IOWA (19) (1 2) County: CASS (15) (3 4) Town: ANITA, TOWN

Well No. Latitude 4126 50 N (5–11) Longitude 094 46 07 (12–18) Seq. No. 1 (19) Date M D Y 06 17 69 (20–25)

Sampling Depth 214 (26–29) Type 1 (30) Kx10⁶ 1300 (31–35) pH 7.8 (36–38) Temp. °F 52 (39–41)

SiO_2 25. (42–44) Ca 184. (45–49) Mg 44. (50–53) Na 66. (54–58) K 5.2 (59–61)

Source No. 3 Q

HCO_3 354 (62–65) CO_3 0 (66 67) SO_4 490. (68–72) Cl 1. (73–78)

Card R

Duplicate Columns 1-25 from Card Q

F .6 (26–28) NO_3 .1 (29–32) PO_4 . (33–35) B . (36–38) Al . (39–41) Fe .04 (42–45)

Mn .11 (46–49) Cu . (50–52) Pb . (53 54) Zn . (55–57)

Solids Determined 1040 (58–63) Calc. (64–69) Ca,Mg 640 (70–73) Hardness Non-Carb. 350 (74–77)

Color (78 79) No. R (80)

Card S

Duplicate Columns 1-25 from Card Q

Br . (26–28) I . (29–31) Alk. as $CaCO_3$ 290 (32–35) Free CO_2 (36–38) SAR . (39–41)

RSC (42–44) ABS . (45–47) (48–50)

Alpha (pc/l) (55–57) Beta (pc/l) (58–60) Ra (pc/l) . (61–63) U (ug/l) . (64–66)

No. S (80) 3

Recorded by: D. AARONSON

Punched by: T Date:

Published:

UNITED STATES DEPARTMENT OF THE INTERIOR
Geological Survey
Water Resources Division

Water Quality
(ppm)

Local Well No. 077-34W-21CDD
Aquifer Code(s) KIDI
Owner's Name ANITA CITY WELL #3 (1949)
W Number 04088

Card Q

State: IOWA [19] (1 2) County: CASS [15] (3 4) Town: ANITA, TOWN

Well No. Latitude [4126501N] (5–11) Longitude [094460 7] (12–18) Seq. No. [1] (19) Date M D Y [063050] (20–25)

Sampling Depth [214] (26–29) Type [1] (30) Kx10^6 [12 50] (31–35) pH [7.4] (36–38) Temp. °F [ ] (39–41)

SiO_2 [.] (42–44) Ca [170.] (45–49) Mg [43.] (50–53) Na +K [68.] (54–58) K [.C] (59–61)

HCO_3 [344] (62–65) CO_3 [0] (66–67) SO_4 [460.] (68–72) Cl [4.] (73–78) Source No. [3] (79) [Q] (80)

Card R

Duplicate Columns 1-25 from Card Q

F [.7] (26–28) NO_3 [0.] (29–32) PO_4 [.] (33–35) B [.] (36–38) Al [.] (39–41) Fe [.1] (42–45)

Mn [1.1] (46–49) Cu [.] (50–52) Pb [ ] (53–54) Zn [.] (55–57)

Solids Determined [1000] (58–63) Calc. [ ] (64–69) Ca,Mg [602] (70–73) Hardness Non-Carb. [220] (74–77)

Color [ ] (78–79) No. [R] (80)

Card S

Duplicate Columns 1-25 from Card Q

Br [.] (26–28) I [.] (29–31) Alk. as $CaCO_3$ [382] (32–35) Free CO_2 [ ] (36–38) SAR [.] (39–41)

RSC [ ] (42–44) ABS [.] (45–47) [.] (48–50) [ ] (51–54)

Alpha (pc/l) [ ] (55–57) Beta (pc/l) [ ] (58–60) Ra (pc/l) [.] (61–63) U (ug/l) [.] (64–66)

No. [S] (80) 3

Recorded by: D. AARONSON

Punched by: J Date:

Published:

UNITED STATES DEPARTMENT OF THE INTERIOR
Geological Survey
Water Resources Division

Water Quality
(ppm)

Local Well No. 077-34W-21CDD
Aquifer Code(s) KIDI
Owner's Name ANITA CITY WELL #3 (1949)
W Number 04088

Card Q

State: IOWA (19) County: CASS (15) Town: ANITA, IOWA

Well No. Latitude 412650N (5–11) Longitude 0944607 (12–18) Seq. No. 1 (19) Date M D Y 013156 (20–25)

Sampling Depth 214 (26–29) Type 1 (30) Kx10⁶ 1150 (31–35) pH 7.5 (36–38) Temp. °F 56 (39–41)

SiO_2 23 (42–44) Ca 152 (45–49) Mg 38 (50–53) Na 45 (54–58) K 4.3 (59–61)

HCO_3 331 (62–65) CO_3 0 (66–67) SO_4 381 (68–72) Cl 30 (73–78) Source No. 3 Q (79–80)

Card R

Duplicate Columns 1-25 from Card Q

F .6 (26–28) NO_3 40 (29–32) PO_4 (33–35) B (36–38) Al (39–41) Fe .06 (42–45)

Mn .85 (46–49) Cu (50–52) Pb (53–54) Zn (55–57)

Solids Determined 873 (58–63) Calc. (64–69) Ca,Mg 540 (70–73) Hardness Non-Carb. 269 (74–77)

Color (78–79) No. R (80)

Card S

Duplicate Columns 1-25 from Card Q

Br (26–28) I (29–31) Alk. as $CaCO_3$ 271 (32–35) Free CO_2 (36–38) SAR (39–41)

RSC (42–44) ABS (45–47) (48–50)

Alpha (pc/l) (55–57) Beta (pc/l) (58–60) Ra (pc/l) (61–63) U (ug/l) (64–66)

No. S (80) 3

Recorded by: D. AARONSON

Punched by: I Date:

Published:

Test Well #1 NE SW NW 28, 77-34

Jan. 20, 1934 T.D. 127'

Surface	0
74'	soil & clay, somewhat sandy
2'	sand
15'	clay
2'	sand
1'	blue clay
4'6"	sand
9'6"	blue clay
12'	sh
1'	Ls
1'	sh
5'	Ls (Pecon)

Test well #2 SW/c 24, 77, 34

Completed Feb. 24, 1934 T.D. 167'

Surface	0	
	76'6"	Sand, (poor quality)
	56'6"	blue clay
	4'	Sand
	5'6"	soft shale
	10'6"	Dakota? sh
	3"	Ls
	10"	sh
	15"	Ls
	7"	sh
bottom	14"	Ls

Test Well #3 SE NW 21, 77-34.
Completed Mar. 16, 1934 T.D. 214'

Surface	0	
	195'	soil, Clay & sand.
	5'	Ss
	2'	Sh
	4'	Ss
	13"	Sh
	7'	Ss (Crse)
bottom	2'	Red Ss
	Ls.	

Test well #4 Anita

Located in Victory Park

T.D. 216'

Surface 176' Drift & clay

6' Dakota ? sh

Bottom 36' Dakota sandstone.

Cass
(Anita)

January 21, 1946

Mr. R. W. Brooks
Layne-Western Company
Ames, Iowa

Dear Mr. Brooks:

In reply to your letter of January 16 we have prepared a brief forecast of the geology and ground-water conditions in the vicinity of Anita, Cass county.

Our information indicates that the drift should be approximately 200 feet thick, composed principally of boulder clay. Sand and gravel beds apparantly are not common. Beneath the drift, sand is reported in wells within a short distance of the location which you indicate 2½ miles south and 1 mile east of Anita. Undoubtedly this sand is Dakota sandstone known to be present over much of this area. Unfortunately the Dakota is discontinuous and hence there is a possibility that it is absent at that particular location.

Pennsylvanian rocks occur below the Dakota or, where the Dakota is absent, beneath the drift. Relatively little is known about these rocks because of the lack of outcrops and good well records. However, the rocks are believed to belong to the Shawnee group which contains a number of limestone formations. We have a record of a well about 7 miles southwest of the proposed site which was drilled into the Pennsylvanian section some 64 feet. However, about 22 feet of Dakota sandstone lay above the Pennsylvanian and may be the principal source of water.

The quality of the water from the Dakota sandstone is excellent in this area as indicated by several water analyses. The hardness is reported to be only 184 p.p.m. from the Wiota City well and the iron and sulphate are also low. At Anita the hardness of water from the old city well, 216 feet deep, was 400 p.p.m., but no analysis has yet been made by the Survey of water from the well drilled in 1944 to a depth of 228 feet.

There appears to be a good chance that the Dakota sandstone will be present at the site which you mention. This formation yields an adequate supply of water of good quality in the immediate area. If the Dakota formation is absent the Pennsylvanian limestones offer a reasonable chance for water satisfactory for farm supply, although the quantity of water available is likely to be small and the quality not so good as that from the Dakota sandstone.

Needless to say we shall be most interested in any well drilled in this area and shall appreciate a complete set of samples and construction and production data. If we can be of further assistance we shall expect to hear from you.

Very truly yours,

H. G. Hershey

HGH:SEH:LIH

LAYNE-WESTERN COMPANY

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THROUGHOUT THE COUNTRY

AMES, IOWA

3

January 16, 1946

JAN 17 1946

Dr. H. G. Hershey
Iowa Geological Survey
Geology Annex Building
Iowa City, Iowa

Dear Dr. Hershey:

We are interested in securing a water supply at a farm 2½ miles south and 1 mile east of the city of Anita. If you can give us any information on this location, we would appreciate it.

Yours very truly

LAYNE-WESTERN COMPANY

R. W. Brooks

rwb/mdc

Iowa
State Department of Health
DISTRICT HEALTH SERVICE
NO. 6
Des Moines 19, Iowa

WALTER L. BIERRING, M. D.
COMMISSIONER
DES MOINES, IOWA

IN REPLYING
ADDRESS
R. C. Hanlon
Public Health Engineer

4

February 26, 1945

H. G. Hershey,
Associate State Geologist,
Iowa Geological Survey,
Iowa City, Iowa.

Dear Dr. Hershey:

While making a routine investigation of the Anita public water supply recently, it was learned that a new well was put down last fall by Olson and Anderson, well contractors of Oakland, Nebraska. An eight-inch hole to a depth of two hundred twenty-eight feet was constructed. Sixteen feet of eight-inch screen was placed at the bottom of the hole. No pumping test has yet been completed and it is understood that an eighty gallon per minute pump will soon be installed. Apparently the pump was selected from the pumping test made on a previous well drilled in 1934 by H. H. Brown of Blair, Nebraska. The local officials do not have the records on this pumping test but understood that their present well driller does have this information.

The new well is located three hundred feet north of the present active well in the north part of Anita within the city limits. Samples of the drill cuttings from a depth of one hundred eighty-two feet to two hundred twenty-eight feet are now stored at the light plant in Anita. The superintendent of utilities and water works, Mr. E. B. Ford, plans to construct a model log of the well and use some of these cuttings for that purpose but appeared cooperative in submitting a portion of each cutting to your office for examination if desired. There are fourteen of these samples.

This information is being passed on for what it may be worth. In event you would like the drill cuttings, Mr. Ford promised to send them upon the receipt of a request from your office.

Very truly yours,

R. C. Hanlon

R. C. Hanlon,
Public Health Engineer,
District #6.

RCH:jg

Punched FCH

WRD Exp. (GW)
Aug. 1964

Verified PMJ

U. S. DEPARTMENT OF THE INTERIOR — GEOLOGICAL SURVEY

Water Resources Division Well Schedule Form

MASTER CARD

Record by R. W. COBLE Source of data FILE Date 7/19/65 Map county Hwy 1:63,360

State IOWA [1 6] County (or town) CASS [1 5]

Latitude: [4 1 2 6 5 0 N] deg min sec N S Longitude: [0 9 4 4 6 0 7] degrees min sec Sequential number: [1]

Lat-long accuracy: [2] T. 77 N/S, R 34 E/W, Sec 21, SE ¼, SE ¼, SW ¼ 5 B & M

Local well number: [0 7 7 3 4 W 2 1 c d d] Other number: W-4089

Local use: [0 4 0 8 8   4 9 C I T Y   3] Owner or name: TOWN OF ANITA

Owner or name: [A N I T A   I Ø W A] Address: ANITA, IOWA

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) Dom, (I) Irr, (N) 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 [2] Freq. W/L meas.: ORIGINAL [Ø] Field aquifer char. [ ]

Hyd. lab. data: [ ]

Qual. water data; type: COMPLETE [C]

Freq. sampling: IRREGULAR [I] Pumpage inventory: yes no period: [ ]

Aperture cards: yes [ ]

Log data: GEOLOGIC AND DRILLERS [G D]

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 214 ft [2 1 4] Meas. rept DRL accuracy [3]

Depth cased; (first perf.) 200 ft [2 0 0] Casing type: ; Diam. 12 in [1 2]

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

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: 10/1/49 [0 4 9] Pump intake setting: ft [ ]

Driller: OLSON & SON (name), OAKLAND, NEB. (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 [ ] Deep / Shallow [ ]

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

Descrip. MP LSD ft above/below lsd, Alt. MP 1365

Alt. LSD: 1365 [1 3 6 5] Accuracy: (source) ALT. [7]

Water Level 154 ft above/below MP; Ft above/below lsd [1 5 4] Accuracy: DRL [3]

Date meas: 10/1/49 [0 4 9] Yield: 115 gpm [1 1 5] Method determined [ ]

Drawdown: ft [ ] Accuracy: [ ] Pumping period hrs [ ]

QUALITY OF WATER DATA: Iron 0.12 ppm [2] Sulfate 328 ppm [7] Chloride 2 ppm [0] Hard. 520 ppm [8]

Sp. Conduct 1080 K x 10^6 [5] Temp. 88? °F [8 8] Date sampled 11/30/60 [N 6 0]

Taste, color, etc.

077-34W-21cdd

Well Number 41, 26, 50 (N/S) 094, 46, 07, 1
d m s d m s

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD (1–19) Physiographic Province: CENT. LOW. [1 2] (20–21) Section: DISS TILL PLAINS [E] (22)

Drainage Basin: NISHNABOTNA [3 5 D] (23–25) Subbasin: ______ [ ] (26)

Topo of well site: (D) local depression, (F) flat surface, (H) hilltop, (S) hillside, (T) terrace, (V) valley flat, ______ (27) [H]

MAJOR AQUIFER: CRET (system), LOW (series) [K 1] (28–29) DAKOTA SANDSTONE (aquifer, formation, group) [D 1] (30–31)

Lithology: MED. SANDSTONE [3 V] (32–33) Origin: MARINE [6] (34) Aquifer Thickness: ______ ft

[ ] (35–37) Length of well open to: 14 ft [1 4] (38–40) Depth to top of: 190 ft [1 9 0] (41–43)

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: 200-214

Depth to consolidated rock: 190 ft [1 9 0] (60–63) Source of data: SAMPLES (64) [C]

Depth to basement: ______ ft [ ] (65–68) Source of data: ______ (69) [ ]

Surficial material: LOESS [Q] (70–71) Infiltration characteristics: POOR (72) [4]

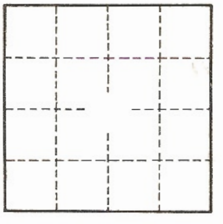
Coefficient Trans: ______ gpd/ft [ ] (73–75) Coefficient Storage: ______ [ ] (76–78)

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

CASING:

12" 0-200

8" screen 200-214



GPO 844-225