

7 1/2' Ayrshire  
430218N-0944958-02

095-34-23 BBAB

1980 field located by D. Karsten

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

13839

Location: SOUTH SIDE OF FIRE HOUSE (NE)  
Town: AYRSHIRE (SW) County PALO ALTO  
NW NW sec. 23 T. 95 N., R. 39 (W) Twp.


Well name and number \_\_\_\_\_

Owner AYRSHIRE TOWN WELL Address AYRSHIRE, IOWA  
(1962)

Tenant \_\_\_\_\_ Address \_\_\_\_\_

Contractor THORPE WELL CO Address \_\_\_\_\_

Drillers BOB YARRAUGH, DARWIN EVANS, ELVIN GREENE

Drilling dates MAY 4 - JUNE 8, 1962

Well data:  
Altitudes: Drilling curb \_\_\_\_\_ feet; Land surface 1332 feet

Determined by Blumeth (PDR)

Topographic position \_\_\_\_\_

Total depth: Reported 900 feet; Measured \_\_\_\_\_ feet

Drilling method Rotary

Hole and casing data 310' OF 10" CSG. - CEMENTED  
584' OF 6" 283-867' - CEMENTED

Original depth to water, \_\_\_\_\_ ft. below \_\_\_\_\_ Date \_\_\_\_\_

Source of data \_\_\_\_\_



UNITED STATES DEPARTMENT OF THE INTERIOR

Geological Survey  
Water Resources Division

Local Well No. 095-34W-23BB  
Aquifer Code(s) Ø2MP  
Owner's Name AYRSHIRE TOWN (1962)  
W Number 13839

Water Quality  
(ppm)

Card Q

State: Iowa 1 9 County: PALO ALTO 7 4 Town: AYRSHIRE, IOWA

Well No. 4 3 0 2 1 0 N 0 9 4 5 0 0 0 Seq. No. 1 Date 0 2 2 8 6 3

Sampling Depth 9 0 0 Type 1 Kx10<sup>6</sup> 2 1 3 0 pH 6 8 Temp. °F 5 1

SiO<sub>2</sub> 1 3 1 Ca 2 9 6 Mg 8 0 Na 9 8 K 1 6

HCO<sub>3</sub> 3 7 8 CO<sub>3</sub> 0 SO<sub>4</sub> 8 8 6 Cl 1 2 Source No. 3 Q

Card R

Duplicate Columns 1-25 from Card Q

F 5 NO<sub>3</sub> 4 PO<sub>4</sub> B Al Fe 3 1

Mn 1 5 Cu Pb Zn Solids Hardness

Determined 1 8 0 0 Calc. Ca, Mg 1 0 7 0 Non-Carb. 7 6 0

Color No. R

Card S

Duplicate Columns 1-25 from Card Q

Br I Alk. as CaCO<sub>3</sub> 3 1 0 Free CO<sub>2</sub> SAR 41

RSC ABS 48 50

Alpha (pc/l) Beta (pc/l) Ra (pc/l) U (ug/l) 66

No. S  
80

Recorded by: D. AARONSON

Punched by: T Date: lw

Published: \_\_\_\_\_

UNITED STATES DEPARTMENT OF THE INTERIOR

Geological Survey  
Water Resources Division

Local Well No. 095-34W-23BB

Aquifer Code(s) Ø2MP

Owner's Name AYRSHIRE TOWN (1962)

W Number 13839

Water Quality  
(ppm)

Card Q

State: Iowa 1 2 1 9 County: PALO ALTO 3 4 7 4 Town: AYRSHIRE, IOWA

Well No. 5 11 4 3 0 2 1 0 N 12 18 0 9 4 5 0 0 0 Seq. No. 19 1 Date 20 25 0 8 0 8 6 7

Sampling Depth 26 29 9 0 0 Type 30 1 Kx10<sup>6</sup> 31 35 2 1 0 0 pH 36 38 7.3 Temp. °F 39 41 4 8

SiO<sub>2</sub> 42 44 9 0 Ca 45 49 2 9 2 Mg 50 53 8 0 Na 54 58 1 2 0 K 59 61 1 5

HCO<sub>3</sub> 62 65 3 8 6 CO<sub>3</sub> 66 67 0 SO<sub>4</sub> 68 72 9 1 0 Cl 73 78 1 5 Source No. 79 80 3 Q

Card R

Duplicate Columns 1-25 from Card Q

F 26 28 5 NO<sub>3</sub> 29 32 1 PO<sub>4</sub> 33 35  B 36 38  Al 39 41  Fe 42 45 1 1

Mn 46 49 2 6 Cu 50 52  Pb 53 54  Zn 55 57

Determined 58 63 1 7 7 0 Solids 64 69  Ca, Mg 70 73 1 0 6 0 Hardness Non-Carb. 74 77 7 4 4

Color 78 79  No. 80 R

Card S

Duplicate Columns 1-25 from Card Q

Br 26 28  I 29 31  Alk. as CaCO<sub>3</sub> 32 35 3 1 6 Free CO<sub>2</sub> 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

Recorded by: D. AARONSON

Punched by: T Date: out

Published: \_\_\_\_\_

UNITED STATES DEPARTMENT OF THE INTERIOR

Geological Survey  
Water Resources Division

Local Well No. 095-34W-23BB

Aquifer Code(s) ØZMP

Owner's Name AYRSHIRE TOWN (1962)

W Number 13839

Water Quality  
(ppm)

Card Q

State: IOWA 1 9 County: PALO ALTO 7 4 Town: AYRSHIRE, IOWA

Well No. 4 3 0 2 1 0 N 0 9 4 5 0 0 0 Seq. No. 1 Date 0 2 1 7 6 9

Sampling Depth 9 0 0 Type 1 Kx10<sup>6</sup> 1 8 0 0 pH 7 0 Temp. °F 5 0

SiO<sub>2</sub> 1 1 Ca 2 9 6 Mg 7 8 Na 1 2 0 K 2 0

HCO<sub>3</sub> 3 9 5 CO<sub>3</sub> 0 SO<sub>4</sub> 9 4 0 Cl 1 3 Source No. 3 Q

Card R

Duplicate Columns 1-25 from Card Q

F 8 NO<sub>3</sub> 4 PO<sub>4</sub>     B     Al     Fe 9 3

Mn 2 5 Cu     Pb     Zn    

Determined 1 7 9 0 Solids         Ca, Mg 1 0 6 0 Hardness Non-Carb. 7 3 6

Color     No. R

Card S

Duplicate Columns 1-25 from Card Q

Br     I     Alk. as CaCO<sub>3</sub> 3 2 4 Free CO<sub>2</sub>     SAR    

RSC       ABS            

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

No. S  
80

Recorded by: D. AARONSON

Punched by: T Date:  

Published:

U. S. DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Water Resources Division Well Schedule Form

MASTER CARD

Record by P.J. Horick Source of data Files Date 6/14/65 Map H. & T.

State Iowa County (or town) Palo Alto Sequential number: 74

Latitude: 43° 02' 10" N Longitude: 094° 50' 00" W

Local well number: 09534W2366 Other number: W-13839

Local use: 13839 62 CITY Owner or name: AYSHIRE

Owner or name: AYSHIRE IOWA Address: Ayshire, 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, Stock, Instit, Unused P

Use of well: Anode, Drain, Seismic, Obs, Oil-gas, Recharge, Spring, Test, Unused, W

DATA AVAILABLE: Well data 1 Freq. W/L meas.: INVENTORY Field aquifer char. 2

Hyd. lab. data: 73

Qual. water data; type: C

Freq. sampling: 1 Pumpage inventory: yes 76 no, period: 77

Aperture cards: 78

Log data: GEOLOGIST LOG 79

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 900 ft Meas. 9:00 accuracy 24

Depth cased: 867 ft Casing Type: STEEL Diam. 10 in 29

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

Method: air bored, cable, dug, hyd jetted, air reverse trenching, driven, drive wash, other 4

Date Drilled: JUNE 1962 Pump intake setting: 9:6:2 ft 36

Driller: Thorpe Well Co. Des Moines Iowa

Lift (type): air, bucket, cent, jet, multiple, nose, piston, rot, submerg, turb, other 39 Deep 40 Shallow 40

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

Descrip. MP LSD ft above 41 below 41 lsd, Alt. MP 1332

Alt. LSD: 1332 Accuracy: ALTIMETER 47

Water Level 205 ft above 42 below 42 lsd Accuracy: DRILLER'S LOG 52

Date meas: JUNE 1962 Yield: 70 gpm 54 Method determined 51

Drawdown: 65 ft Accuracy: 3 Pumping period 58

QUALITY OF WATER DATA: Iron 7 Sulfate 8 Chloride 1 Hard. 9

Sp. Conduct 5 K x 10<sup>6</sup> Temp. 50 Date sampled 17 FEB. 1967

Taste, color, etc. 79

095-34W-2366

Well Number 43.02.10 094.50.00.1

HYDROGEOLOGIC CARD

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

LAKE B Drainage Basin: DES MOINES Subbasin: 25B

Topo of well site: local depression, flat surface, hilltop, hillside, terrace, wadley flat, 27

MAJOR AQUIFER: Ordovician, Charzau St. Peter Sandstone M.P.

Lithology: FINE SANDSTONE Origin: AMARANTE Aquifer Thickness: 33 ft

Length of well open to: 33 ft Depth to top of: 865 ft

MINOR AQUIFER: 33 ft

Lithology: 33 ft

Length of well open to: 33 ft Depth to top of: 33 ft

Intervals Screened: 33 ft

Depth to consolidated rock: 310 ft Source of data: WELL CUTTINGS

Depth to basement: 33 ft Source of data: 33

Surficial material: SANDY MCL Infiltration characteristics: POOR

Coefficient Trans: 33 gpd/ft Coefficient Storage: 33

Coefficient Perm: 33 gpd/ft; Spec cap: 33 gpm/ft; Number of geologic cards: 33

Casing:

310' of 10" csq. 0-310', cemented  
584' of 6" csq. 283-867', cemented

Note: Top bedrock is Dakota SS (Cretaceous)

