

wt 4480

Handwritten notes:
Hawes samples

IOWA GEOLOGICAL SURVEY
Iowa City, Iowa

Well Log Record

Well name and number Town of Wayland Town Wayland County Henry

Owner of well _____ Address _____

Tenant _____ Address _____

Location SE SW SE sec. 4, T. 73 N., R. 7 E. W. _____ Twp. _____
Present final

Curb elevation _____ ft. depth _____ ft. depth _____ ft.

Static level: (Depth to water ^{above} curb) _____ ft. level _____ ft. at _____ g.m. _{below} Pumping

Contractor cd Martin Date drilled Apr 13, 50 to Mar 19, 51

Description*	F E E T			Description*	F E E T		
	Thick	From	To		Thick	From	To
gel clay		0	45	sh		315	565
bl clay		45	82	brd sh		565	607
gel clay		82	97	rock		607	805
brn ls		97	115	sh & rock		805	840
rock & sh		115	170	sh		840	920
rock		170	285	sh & rock		920	940
sh		285	295	rock		940	1160
rock		295	300	rock & some sh		1160	1175
sh		300	305	tr of sh & rock		1175	1220
rock		305	315	ss		1220	1225

*Abbreviate descriptions: use one line for each formation 1225-1237

Remarks on water zones and casings sh 1237-1242

rock 1242-1288

ss 1288-1415

rock

976' of 8" cas

144' of 6" from 1156 - 1300 perf bottom 40'

Temperature: Air _____ °F., Water _____ °F. at P.M. _____ 19 _____ A.M.

Record obtained from _____ Recorded by _____

all other pipe pulled out of hole

Wayland Town

- 0-45 clay, yell
45-82 Clay, blue
82-97 clay, yell 630' of 12" hole
97-115 ls, brwn 630' + 10"
115-170 - RK + sh 617' of 10" hanging
hole
170-285 RK
285-295 sh
295-300 RK
300-305 - sh
305-315 RK
315-565 - sh
565-607 - sh, hard
607-630 - RK
630 - 805 RK
805-840 - sh + RK
840-920 sh
920-940 sh + RK
940-955 RK present depth

RESULTS OF PRODUCTION TEST
ON
WAYLAND TOWN WELL
March 9, 1951

NAME: Wayland Town Well

LOCATION: SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4, T. 73 N., R. 7 W.

OWNER: Town of Wayland

CONTRACTOR: Hoeg & Ames, Lincoln, Iowa

ELEVATION: 750 ft.

DRILLER: Ed Martin and Earl Kroger

DRILLING DATES: September 13, 1950, to March 7, 1951

TOTAL DEPTH: 1415 ft.

TEST PUMP: Turbine pump set at 224 ft. powered by a tractor.

TEMPERATURE MEASUREMENTS: Made at end of 100' firehose.

DISCHARGE MEASUREMENTS: Made into tank of known capacity.

WATER LEVEL MEASUREMENTS: Measured from top of 8" casing 1.5' above
land surface.

REMARKS: Observations made by C. R. Murray and C. W. Lane.

RESULTS OF PRODUCTION TEST
ON
WAYLAND TOWN WELL
March 9, 1951

<u>Time</u>	<u>Depth to Water</u>	<u>GPM</u>	<u>Water Temp. °F</u>	<u>Air Temp. °F</u>	<u>Remarks</u>
9:16 am	137.16				
9:20	137.16				
9:25	137.15				
9:31					Pump started
9:47	223.71				
9:36		73	55		
9:52	223.77		64		Water slightly muddy
9:54		72.5			
9:58	223.75				
10:02			65		
10:07	223.71				
10:16	223.74				
10:19		73			
10:25			68		Water slightly cloudy
10:34	223.72				
10:40		72.5			
10:45	223.73			22	
10:46			69		
11:00	223.71				Water clear
11:29	223.74				
11:40		72.5	69.5		
11:56	223.70				
12:15 pm		73	70		
12:18	223.71				
12:35	223.73				
1:10		73	70		
1:12	223.73				
1:30		73	70	32	Water clear
1:35	223.73				
2:10	223.73				
2:56	223.74				
3:02		73	70		
3:39	223.74				
4:00	223.73				
4:05		73	70		
5:01	223.75				
5:08		73	70		Water slightly cloudy
5:25	223.75		70		
5:31					Pump off
5:32	170.30				
5:33	152.65				
5:33:30	148.50				
5:34	144.00				
5:35	142.42				

<u>Time</u>	<u>Depth to Water</u>	<u>GPM</u>	<u>Water Temp. °F</u>	<u>Air Temp. °F</u>	<u>Remarks</u>
5:36	140.50				
5:37	139.50				
5:38	139.00				
5:39	138.75				
5:40	138.55				
5:41	138.50				
5:42	138.45				
5:44	138.35				
5:46	138.27				
5:48	138.20				
5:50	138.16				
5:52	138.12				
5:54	138.07				
5:56	138.02				
5:58	138.00				
6:00	137.97				
6:03	137.92				
6:06	137.90				
6:09	137.86				
6:13	137.82				
6:17	137.79				
6:22	137.75				
6:29	137.72				
6:38	137.67				
6:50	137.62				
7:05	137.56				
7:43	137.51				
9:08	137.40				
10:43	137.43				

7 1/2' Olds NW (now Wayland) Quad

410851 0913946-01

073-07W-019 AABC

1980-field located by

D. Knutson (?)

IOWA GEOLOGICAL SURVEY

In Cooperation with U. S. Geological Survey

1-4480

RECORD OF WELL

Location:

Town:

Wayland

(N E)

(S W)

County

HENRY

SE SW SE

sec. 4

T 3 N.

R. 7 W.

Twp.

Well name and number

Wayland Town Well

Owner

Address

Tenant

Address

Contractor

Hoeq & Ames

Address

Drillers

Ed Martin

Drilling dates

Sept 13 - 1950 - March 1951

Well data:

Elevations: Drilling curb

751.5'

feet: Land surface

750'

feet

Determined by

ACK AH

Topographic position

Flat upland

Total depth: Reported

1415

feet, Measured

feet

Drilling method

Hole and casing data

18' of 16" pipe from +2' to 16±'

100' of 12" pipe from +2± to 98±'

Original depth to water

above
ft. below

Date

Original elevation of water level

ft.;

Source of data

Sources of water: Principal

; Others

Production data:

Date _____

 Static depth to water 137.16 Measuring point _____
 Pumping level 223.71 at 73 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 or productions: _____ g.p.m. for _____ hrs. a day
 Use of water _____

WATER ANALYSES (in parts per million)

Date samples	_____	_____	_____
Samples 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 CH8-4
 Sample range 0-250 No. spls. 49 No. dupls. & cond. 49 - Good
 Spls. prepared by AIF Washed range 80-250 by AIF 10/9/50

Driller's log and cond. _____

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

Microscopic study DCH strip log DCHGen. log _____ Correl. by DCH