

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

RECORD OF WELL



Location:

Town: Stanwood ( N.E. ) ( S.W. ): County Cedar

NW 1/4 / NE 1/4 / SW 1/4 sec. 24 T 82 N., R. 3 W. Twp.

Well name and number Stanwood City (1946)

Owner Stanwood City Address \_\_\_\_\_

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

Contractor Edwards & Son Address West Branch

Drillers D. E. Edwards

Drilling dates \_\_\_\_\_

Well data:

Elevations: Drilling curb 843.7<sup>+</sup> feet; Land surface: 841.7 feet

+ top of 6" casing

Determined by S.E.H. & T.B.

Topographic position upland

Total depth: Reported 303 feet, Measured \_\_\_\_\_ feet

Drilling method cable tool

Hole and casing data 259'9" of 1 1/2" 6-inch casing 0-259'9"

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

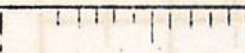

Original elevation of water level \_\_\_\_\_ ft.; Source of data \_\_\_\_\_

Sources of water: Principal Shurion; Others \_\_\_\_\_

CASING DIAGRAM

LOG

Vertical scale \_\_\_\_\_

	
	<p>top rock at 251 ft</p>
	<p>crvice 263-263 1/2</p>
	<p>crvice 277-279</p>
	

## Production data:

Date April 18, 1946

Static depth to water 13 1/2 Measuring point Top of 6" casing  
 Pumping level 70 at 90 g.p.m.  
138 75

Specific capacity \_\_\_\_\_ g.p.m. per ft. drawdown; Temperature 54 °F.

Pump data: Type pump Turbine Column Dia. \_\_\_\_\_ Length \_\_\_\_\_  
 Cylinder or bowls: Dia. \_\_\_\_\_ Length \_\_\_\_\_ Suction pipe \_\_\_\_\_  
 Power Electric Airline \_\_\_\_\_  
 Estimated rate of production: \_\_\_\_\_ g.p.m. for \_\_\_\_\_ hrs. a day  
 Use of water City Supply

## WATER ANALYSES (in parts per million)

Date samples	<u>April 18, 1946</u>	_____	_____
Sampled by	<u>S. F. Harris, Jr.</u>	_____	_____
Total solids	<u>836</u>	_____	_____
Insoluble matter	<u>15</u>	_____	_____
Alkalinity (Meo)	<u>312</u>	_____	_____
Alkalinity (Phn)	<u>0</u>	_____	_____
pH	<u>7.8</u>	_____	_____
Fe <sub>2</sub> O <sub>3</sub> + Mn <sub>2</sub> O <sub>3</sub> + Al <sub>2</sub> O <sub>3</sub>	<u>3.5</u>	_____	_____
Alkali as sodium	<u>19.</u>	_____	_____
Calcium	<u>72.</u>	_____	_____
Magnesium	<u>32</u>	_____	_____
Iron (unfiltered)	<u>1.0</u>	_____	_____
Manganese	<u>0</u>	_____	_____
Nitrate	<u>5.3</u>	_____	_____
Fluoride	<u>0.3</u>	_____	_____
Chloride	<u>3.0</u>	_____	_____
Sulfate	<u>9.5</u>	_____	_____
Bicarbonate	<u>381.</u>	_____	_____
Hardness (ppm)	<u>313</u>	_____	_____
Hardness (gpg)	<u>18.3.</u>	_____	_____
Remarks	_____	_____	_____

## Laboratory data:

Sample storage location \_\_\_\_\_

Sample range 0-303 No. spls. 37 No. dupls. & cond. 31 F-PSpls. prepared by P. H. 2890 Washed range 180-303 by P. H. 2890

Driller's log and cond. \_\_\_\_\_

Insoluble residues: Prepared by \_\_\_\_\_ Studied by \_\_\_\_\_ Strip log \_\_\_\_\_

Microscopic study 0-303 strip log \_\_\_\_\_Gen. log \_\_\_\_\_ Correl. by M. Parker

STATE OF IOWA  
IOWA GEOLOGICAL SURVEY  
GEOLOGY ANNEX  
IOWA CITY

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Results of Production Test  
Conducted on  
Stanwood Town Well (1946)  
Stanwood, Iowa  
April 18, 1946

Name: Stanwood Town Well (1946)

Location: NW $\frac{1}{4}$  NE $\frac{1}{4}$  SW $\frac{1}{4}$  Sec. 25 T. 82 N. R. 3 W.

Elevation: 841.7 feet land surface; 843.7 feet top 6-inch casing.

Owner: Town of Stanwood.

Contractor: Edwards and Son.

Driller: D. E. Edwards.

Drilling Dates: April 1946.

Total Depth: 303 feet.

Casing Record: 259 feet 9 inches of 6-inch 19 lb. pipe, from +2 to  
259 feet 9 inches.

Measuring point: Top of 6-inch casing. At air line vent.

Test pump: Turbine electrically driven.

Production: Pumping rate determined by time to fill a tank of 169 gallons  
capacity.

Time	Gage reading	Depth to Water	Discharge GPH	Water Temp.	Remarks
April 18					
1:03 pm	151	13 $\frac{1}{2}$			
1:05					Started pumping.
1:05 $\frac{1}{2}$	12 $\frac{1}{2}$	40			(Discharge line
1:06	116				{150 feet of 2 $\frac{1}{2}$ inches
1:06 $\frac{1}{2}$	105	59			{fire hose
1:07	100	64			
1:07 $\frac{1}{2}$	90	74			
1:09	84	80			
1:10	80	84			Shut down.
1:11	111	53			
1:12	140	24			
1:13	150	14			
1:13					Started pumping.
1:14	102	62			Shut down.
1:15	144	20			
1:17 $\frac{1}{2}$					Started pump.
1:18	109	55			Pumping against 7 $\frac{1}{2}$ lb. pressure.
1:19	81	83			
1:20	60	104			
1:21	44	120			
1:22	33	131			
1:23	26	138	75		
1:24	26	138			
1:25	25 $\frac{1}{2}$	138 $\frac{1}{2}$			
1:28	25 $\frac{1}{2}$	138 $\frac{1}{2}$		54°	Air 71° Water dirty.
1:31	25 $\frac{1}{2}$	138 $\frac{1}{2}$			Water dirty.
1:41	25 $\frac{1}{2}$	138 $\frac{1}{2}$			
1:51	25 $\frac{1}{2}$	138 $\frac{1}{2}$			
2:03			75	54°	Air 72° Water cloudy.
2:37	25	139			
2:39	135	29			Stopped pump.
2:40	146 $\frac{1}{2}$	17 $\frac{1}{2}$			
2:41	148	16			
2:42	148	16			
2:45	148	16			
2:46					Started pump*
2:46 $\frac{1}{2}$	88	76			
2:47	67	97			22 lbs. pressure.
2:47 $\frac{1}{2}$	56	108			
2:48	45	119			
2:49	38	126			46 lbs. pressure.
2:50	35	129			
2:51	33	131			
2:54	32 $\frac{1}{2}$	131 $\frac{1}{2}$			
2:57	31 $\frac{1}{2}$	132 $\frac{1}{2}$			
3:00	31	133			47 lbs. pressure.
3:05	30 $\frac{1}{2}$	133 $\frac{1}{2}$			
3:10	30	134			
3:18	29	135			
3:30	28 $\frac{1}{2}$	135 $\frac{1}{2}$			
3:49	28	136			47-48 lbs. pressure.
4:37	26 $\frac{1}{2}$	137 $\frac{1}{2}$			
5:05	25 $\frac{1}{2}$	138 $\frac{1}{2}$	75 est.	54°	Water sample taken, water clear.

\* Discharge line 50 feet of 2 $\frac{1}{2}$  inches fire hose connected to water system.

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MEMORANDUM

From: H. G. Hershey  
Date: April 27, 1946  
Subject: Stanwood Well - Drilled 1946

Mr. Edwards reports that after our pumping test of April 18, he acidized and developed the well and ran another pumping test which indicated a production of 90 gpm with a pumping level of 70 ft. Mr. Edwards plans on sending us a copy of his results.