

7½' Garner Quad
430023 0933609
095-23W-31 ABPD
1980 field located by D. Karsten

IOWA GEOLOGICAL SURVEY

In Cooperation with U. S. Geological Survey

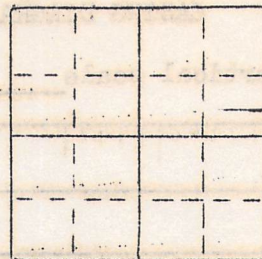
W-0265

RECORD OF WELL

Location:

Town: Klemme (N E)
(S W): County Hancock

NE ¼ SW ¼ NE ¼ sec. 31 T 95 N., R. 23 W. E 1/4 Twp.



Well name and number TOWN Well No 2

Owner _____ Address _____

Tenant _____ Address _____

Contractor THORPE Well Co Address _____

Drillers Bergeson & Diemer

Drilling dates Oct. 2 - Dec. 29, 1937

Well data:

Elevations: Drilling curb 1228.8 feet; Land surface 1227 feet

C.R.I. & P 1229

Elev. of pump base 1228.8; concrete floor 1228.4

Determined by Hand level D.A.B. & W.E.H.

Topographic position _____

Total depth: Reported 1512 feet, Measured _____ feet

Drilling method Cable tool

Hole and casing data 12" - 8" hole

251'6" of 8" Monocast iron pipe from 0 to 251'6"

127'6" of 8" wrought iron casing 853 - 980'6"

Original depth to water _____ ^{above} ft. below curb Date _____

Original elevation of water level 1046.8 ft.; Source of data _____

Sources of water: Principal JORDAN Ss 1383-1470; Others St. Peter 979-1055 (259pm)

Production data:

Date

Static depth to water 182 Measuring point _____
Pumping level 250 at 310 g.p.m.

Specific capacity 4.5 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 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 _____

Sample range 979-1055, 1383-470 No. spls. 2 No. dupls. & cond. _____

Spls. prepared by _____ Washed range _____ by _____

Driller's log and cond. Yes good

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

Microscopic study OK strip log copied from driller's log

Gen. log _____ Correl. by _____

TOWN OF KLEMME

IOWA

January 14th, 1935

Iowa Geological Survey,

Iowa City, Iowa.

Gentlemen:

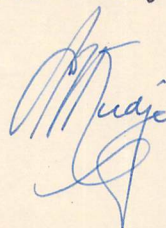
In answer to your inquiry of Dec. 31st, 1934, relative to the elevation at the curb of our wells, I submit the following information.

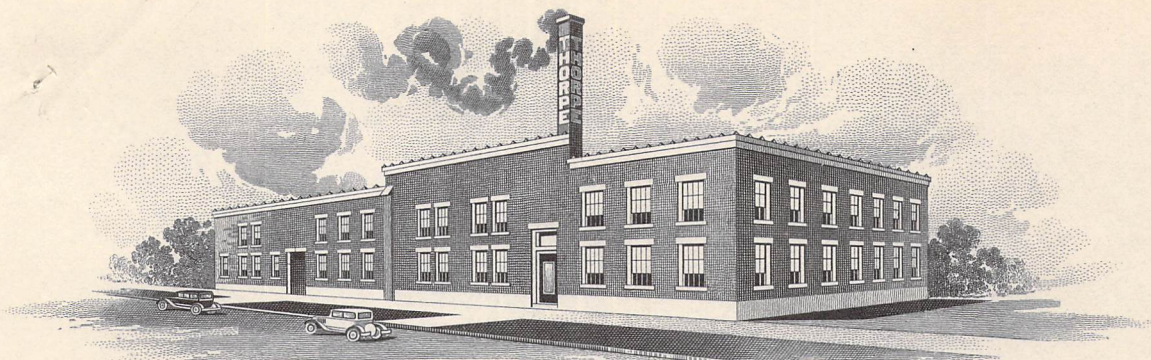
Both of our wells are located on an upland flat, about 25 feet apart, and approximately 1237 feet above sea level. Our old well is 175 feet deep, the water is obtained from a limestone formation, and will be discontinued permanently just as soon as we can install equipment in the new well just being completed. Our new well is 1512 feet deep, the last 35 feet being limestone, and directly above this is 92 feet of the Jordan sandstone, from which our water supply is being taken. If other information is desired, I will be glad to furnish the different formations the entire depth.

Yours very truly

Clerk.

*The new well is a
continuation of the one listed
in your records as 164'*





THORPE BROTHERS WELL COMPANY

WATER, OIL & GAS WELL CONTRACTORS
LATEST ROTARY AND CABLE TOOL EQUIPMENT
THORPE PATENT GRAVEL PACKED WELLS

2340 SIXTH AVENUE

TELEPHONE 3-6107

DES MOINES, IOWA

August 19, 1935.

Dr. A.C. Tester,
Iowa Geological Survey,
Iowa City, Iowa.

Re: Klemme

Dear Dr. Tester,

Answering your letter of July 31st.

The static water level is 182' and the well produced 310 GPM with a 68' drawdown. It is estimated that 95% of the water came from the Jordan.

It seems that we failed to keep cuttings of the formations encountered. This was probably due to the fact that when we started out to deepen the well we had no idea it was going to be necessary to go so deep.

Yours very truly,

THORPE WELL COMPANY

J.P. Lawlor
J.P. Lawlor

Thorpe Well Company
Klemme (City Well No. 2)
30-95N-23W

Hancock County
Elevation 1237 feet (Tester)
Comm. 10- 2-34
Comp. 12-29-34

0 to 150 feet - No Record

164 feet	Lime
172 feet	Shale
175 feet	Lime
196 feet	Shale
880 feet	Lime
912 feet	Lime and shale
915 feet	Shale
922 feet	Lime
963 feet	Shale
976 feet	Lime
979 feet	Shale
1055 feet	Sand "St. Peter"
1133 feet	Lime
1138 feet	Lime and shale
1383 feet	Lime
1470 feet	Sand "Jordan"
1512 feet	Lime

(95% of the water from 1383 to 1470 feet -

310 G. P. M.)

Total Depth 1512 feet

TOWN OF KLEMME

IOWA

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Log Town Well

Klemme, Iowa.

1934

.00*
 .03 Surface
 .10 Yellow clay
 .37 Blue clay
 .02 sand
 .03 Blue clay
 .09 Sand
 .04 Gravel
 .27 Rock
 .08 Broken lime
 .05 Yello shale
 .15 Gray shale
 .18 Rock
 .03 Shale
 .20 Rock
 .08 Shale
 .03 Lime
 .21 Shale
 6.84 Lime
 .32 Shaly Lime
 .03 Shale
 .07 Lime
 .41 Shale
 .13 Lime
 .03 Shale
 .76 St Peter Sandstone
 .78 Lime
 .05 Shaly lime
 2.45 Lime
 .87 Jordan Sandstone
 .42 Lime

1512*

1055
 76
 979

1237
 979
 2584. above sea level

1383
 1237
 146 below sea level
 Jordan

THORPE BROTHERS WELL COMPANY

2340 Sixth Avenue
DES MOINES, IOWA

W-0265

Drilled for Town of Klemme at Klemme, Ia
 Drilling started Oct. 2nd 1934 19 Completed Dec. 29th 1934 19
 Well No. 2 Kind of Well Drilled Depth 1512' Size hole started 12" in.
 Finish 8" G. P. M. 310 Static head 182' Drawdown 68'
 Water was first encountered at 979±01055 in St. Peter Approximate Amount 25GPM
 Remarks _____

RECORD OF PERMANENT PIPE					TEMPORARY PIPE	
SIZE PIPE	AMOUNT OF PIPE	DEPTH TO BOTTOM OF PIPE	DEPTH TO TOP OF PIPE	MAKE OF PIPE	SIZE PIPE	AMOUNT
8"	251' 6"	251' 6"	Surface	MonaCast Iron pipe		
8"	127' 6"	980' 6"	853	Wrought Iron		

Driller Ben Bergeson From Surface to _____ feet
 Driller A.J. Diemer From _____ feet to _____ feet
 Driller Curb Elev. 1237 From _____ feet to _____ feet

AMOUNT IN FEET	KIND OF SOIL OR FORMATION	TOTAL DEPTH FEET
3	Surface	3
10	Yellow clay	13
37	Blue clay	50
2	Sand	52
3	Blue clay	55
9	Gravel	64
4	Sand	68
27	Rock	95
8	Broken Lime	103
5	Yellow shale	108
15	Gray shale	123
18	Rock	141
3	Shale	144
19	Rock	163
1	Shale	164
8	Shale	172
3	Lime	175
21	Shale	196
684	Lime	880
32	Shaly lime	912
3	Shale	915
7	Lime	922
41	Shale	963
13	Lime	974
76	St. Peter sandstone	1055
78	Lime	1133
245	Shaly lime	1138
87	Jordan sandstone	1470
42	Lime	1512

Log Town Well

KLEMME, IOWA.

January 18th, 1935

100'

150' Shale & Limestone- No log at hand-Thorpe Well Co. Des Moines can furni
14' Limestone- A waterbearing formation- Our old well at this point.
8' Shale
200' 3' Limestone
21' Shale

300'

400'

500'

600'

700'

800'

900' 684' Limestone - all hard and fine-no crevices
32' Shaly Limestone
3' Shale
7' Limestone
41' Shale
13' Limestone
3' Shale

1000'

76' St Peter Sandstone- Very hard and fine- very small amount of water

1100'

78' Limestone
5' Shaly limestone

1200'

1300'

245' Limestone - very hard & fine

1400'

87' Jordan Sandstone- Several soft formations within this strata, some
over 7' thick, and seem to contain an abundance of water.

1512' 42' Limestone- Very hard and fine- no water.
1512' Dept of Well
251' 8" cast iron casings from top
127' 6" Wrot iron 8" casings from 852' 6" to 980', otherwise not cased
Thorpe Well Co., Des Moines, Iowa, Contractors
Samples of St Peter & Jordan Sandstones enclosed, We do not have sampl
of the other formations, may possibly be obtained from contractor.
Water level at present 182'

1570
87
1383

A. J. Kudge

Clerk.