

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

Location:

Town: LEON (NE) County DECATUR  
(SW) (E)  
SE/4 sec. 29 T. 69 N., R. 25 (W) CENTRA Twp.


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

Owner LEON CITY Well #4 Address LEON, IOWA

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

Contractor THORPE Well Co. Address DES MOINES, IOWA

Drillers \_\_\_\_\_

Drilling dates APRIL 1963 - SEPT. 25, 1963

Well data:

Altitudes: Drilling curb \_\_\_\_\_ feet; Land surface \_\_\_\_\_ feet 1185.6'

Determined by \_\_\_\_\_

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

Total depth: Reported 2853' feet; Measured \_\_\_\_\_ feet

Drilling method CABLE TOOLS

Hole and casing data \_\_\_\_\_

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

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

Sources of water: Principal PRAIRIE du CHIEN - JORDAN - ST. LAWRENCE


Others \_\_\_\_\_

PRODUCTION DATA

Date \_\_\_\_\_

Static water level 395 } ORIGINAL 405 } \_\_\_\_\_

Pumping water level 484 } PUMPING LEVEL 470 } 3/23/66

Yield (g.p.m.) 307 } \_\_\_\_\_ } 275 }

Measuring point \_\_\_\_\_

Duration of pumping \_\_\_\_\_

Specific capacity \_\_\_\_\_

LABORATORY DATA

75-80-81-82-83-84-85

Well No. W14387 Sample range 0-2853 No. of samples 571

No. of dupls. and cond. 571 Good Washed range 350-2853

Samples prepared by Bud Scheetz Date 9-30-63

Logged by NORMAN Date 1963

Correlations by \_\_\_\_\_ Date \_\_\_\_\_

Drilling method \_\_\_\_\_

Time and boring date \_\_\_\_\_

Original depth to water \_\_\_\_\_

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

# THORPE WELL COMPANY

2340 SIXTH AVENUE  
DES MOINES, IOWA

IOWA GEOLOGICAL SURVEY

R-1-B

MAY 7 - 1964

Drilled for Town of Leon at Leon, Iowa

Well is located in town 4 miles N-E-S-W and 10 miles N-E-S-W from 10

in the 1/4 1/4 Section 10 Township 10 Range 10

Drilling started March 28 1963 Completed Sept. 25 1963

Well No. 4 Kind of Well Drilled Depth 2853 Size hole started 27 in

Finish 8" G. P. M. 325 Static Head 395 Pumping level from surface 498

Water was first encountered at 2520 in New Richmond/sand Approx. Amt. 61ft. Temp. 81°

Remarks Cement bridge set at 2715 to separate Jordan and New Richmond sands ---complete pumping test 3/26/64.

(GIVE DETAILS OF PERFORATED PIPE AND SEALS)

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
18"	363' 6"	363' 6"	1ft. above ground level		30"	6'
16"	268'	601'	333'	Perf - Bottom	24"	64'
12"	417' 7"	996'	578' 5"	" "		
10"	469'	1445'	976'	" "		
12 1/4"	575'	575'	ground level - Swedge Nipple at 575'		12 1/4" to 6 5/8"	
6 5/8"	1790	2365	575'	12 3/4 & 6 5/8 cemented top to bottom		

Driller Richard Nichols From Surface to 2853 feet

Driller Art Lambertz From 0 feet to 2853 feet

Driller AI From feet to feet

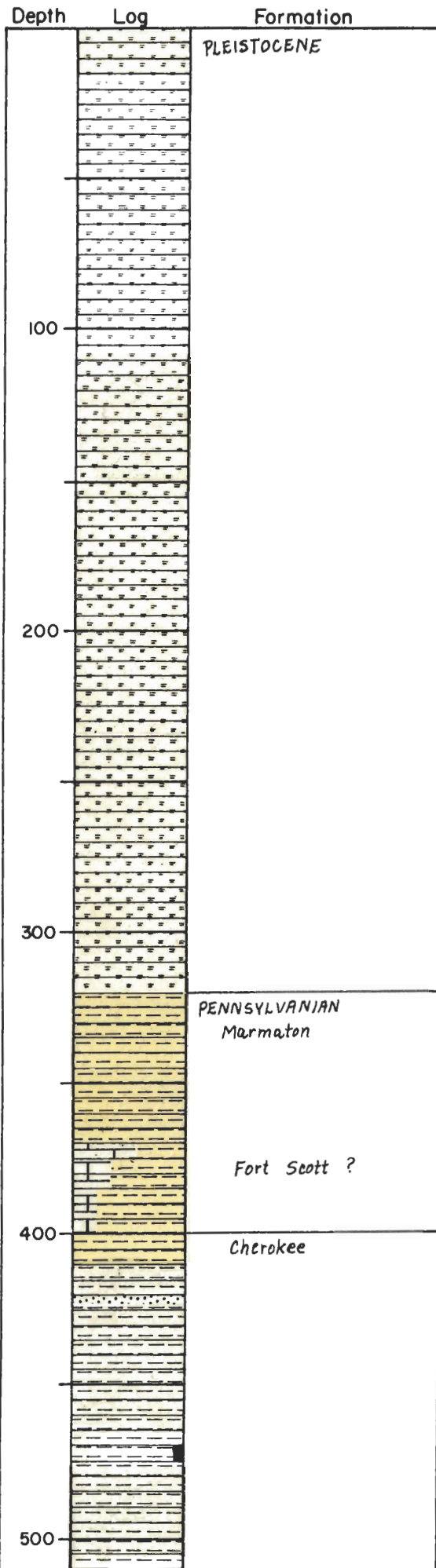
AMOUNT IN FEET	KIND OF SOIL OR FORMATION (BE SPECIFIC)	TOTAL DEPTH FEET
25	Clay - yellow - some gravel	25
8	" " sandy -water	33
4	" " some gravel	37
82	Clay -gray & yellow - pebbles	119
201	Clay " with pebbles & boulders	320
3	Shale - light gray	323
9	Shale dark gray	332
3	Shale black	335
47	Shale gray with lime	382
7	Shale black	389
16	Shale gray	405
5	Shale brown	410
10	Shale gray	420
3	Lime	423
59	Shale gray	482

THE WELL COMPANY

10	Shale black	492
30	Shale gray	522
22	Shale, dark gray - coal streaks	544
6	Shale black	550
10	Shale gray lime shells	560
8	Shale black	568
16	Shale light gray	584
4	Shale gray sandy	588
2	Shale gray sandy	590
7	Sand	597
6	Sand sharp water static 300'	603
12	Shale gray	615
59	Sand sharp	674
4	Sandy gray shale	678
41	Shale gray	719
6	Sand water static 190'	725
55	Shale gray & lime shells	780
5	Shale sandy gray	785
10	Shale gray	795
45	Sandy shale	840
5	Lime	845
20	Shale gray	865
15	Shale black	880
10	Shale dark gray	890
3	Lime hard	893
28	Shale gray	921
26	Shale gray sandy	947
8	Shale red	955
13	Shale gray -	968
4	Sandy lime	972
16	Sand	988
5	Shale	993
3	Lime - hard	996
12	Lime hard	1008
2	Sand	1010
9	Lime	1019
104	Shale & shells	1123
12	Lime hard	1135
95	Lime & chert sharp	1230
16	Lime hard	1246
61	Lime & chert sharp	1307
18	Lime hard	1325
48	Lime gray	1373
30	Shale green	1403
7	Shale gray	1410
15	Shale green	1425
35	Shale green	1460
45	Lime gray static 480' - yellow -	1505
133	Lime brown	1638
12	Lime & chert sharp	1650
63	Dolomite white to gray hard	1713
32	Dolomite brown & gray hard	1745
40	Dolomite brown	1785
8	Dolomite gray	1793
37	Dolomite gray & white static 430'	1830
61	Dolomite brown & gray	1891
9	Shale green	1900
7	Shale & lime shells	1907
3	Shale green & gray	1910
12	Shale green & some lime	1922
	Shale black	
	Shale gray	
	Shale black	
	Shale gray	
	Shale brown	
	Shale gray	

3	Lime	1925
13	Lime & shale	1938
14	Lime	1952
78	Lime sandy chert sharp	2030
51	Lime brown & gray	2081
31	Dolomite brown	2112
88	Dolomite & chert sharp	2200
5	Dolomite brown shale streaks	2205
25	Dolomite brown Hard	2230
35	Dolomite brown hard & soft streaks	2265
31	St. Peter sand	2295
65	Dolomite brown & gray static 395'	2361
112	Dolomite buff hard	2473
37	Dolomite sandy	2510
10	Dolomite White to buff	2520
20	Dolomite & sand	2540
21	Sand white	2561
20	Dolomite & sand	2581
62	Dolomite white to gray	2643
14	Dolomite sandy hard streaks	2657
13	Dolomite & chert sharp	2670
15	Dolomite hard	2685
20	Dolomite sandy light buff	2705
25	Lime gray hard	2730
22	Dolomite sandy hard	2752
30	Dolomite white grains of sand sharp	2782
3	Dolomite hard	2785
14	Dolomite & sand sharp	2799
37	Dolomite light brown fine	2836
19	Dolomite brown & gray with white lime	2853 T.D.

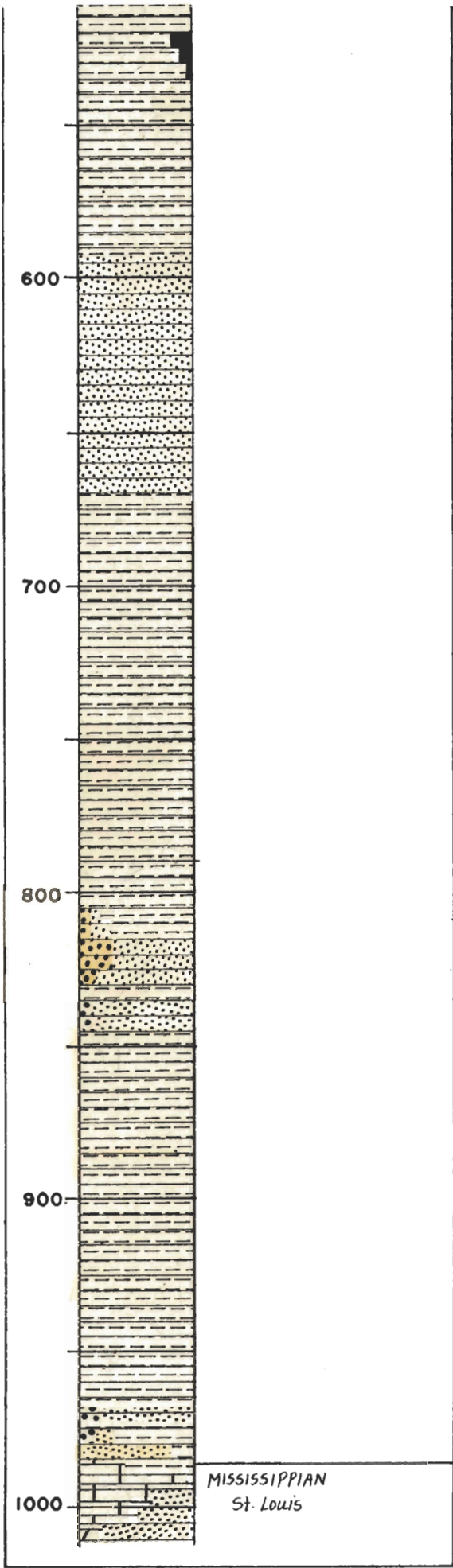
Checked By: Orian Atcheson

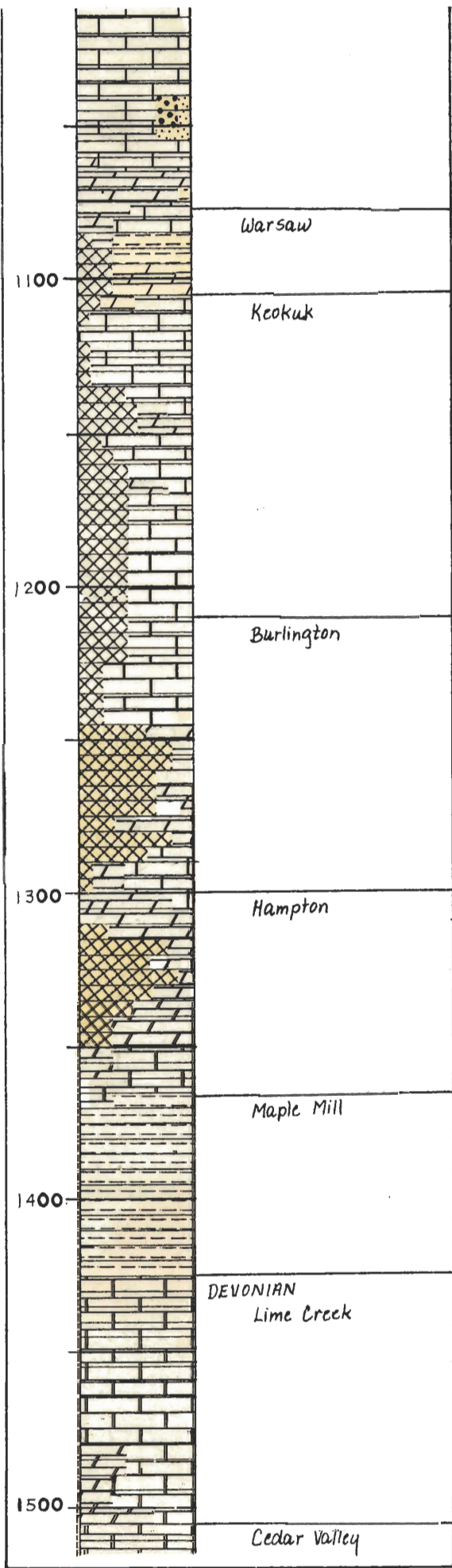


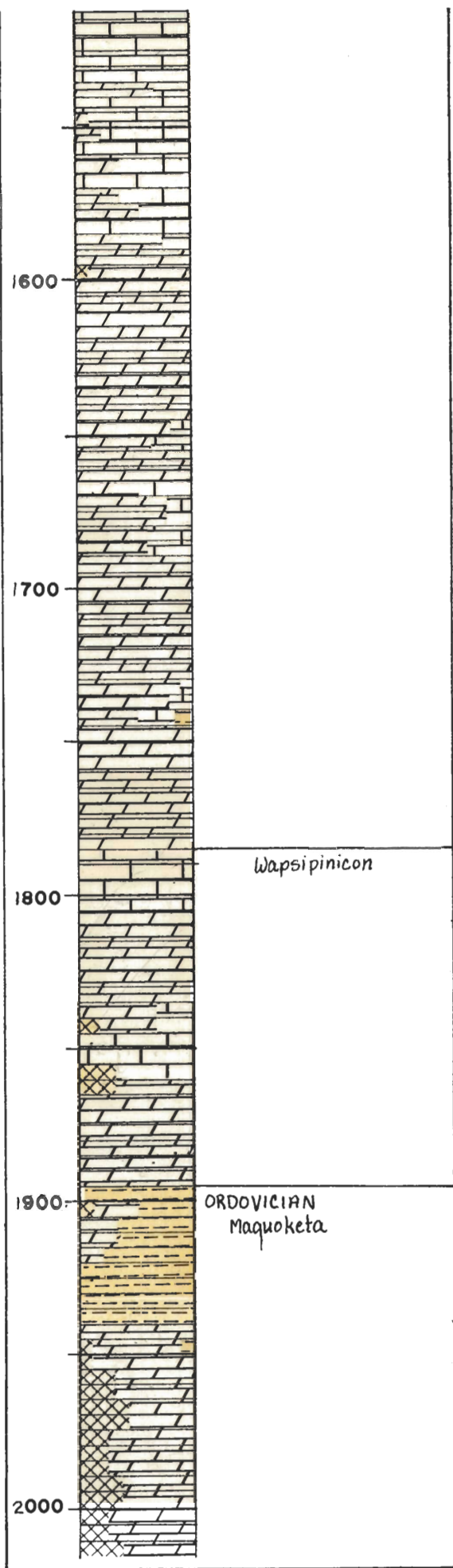
IOWA GEOLOGICAL SURVEY  
In Cooperation with  
U. S. GEOLOGICAL SURVEY  
Iowa City, Iowa

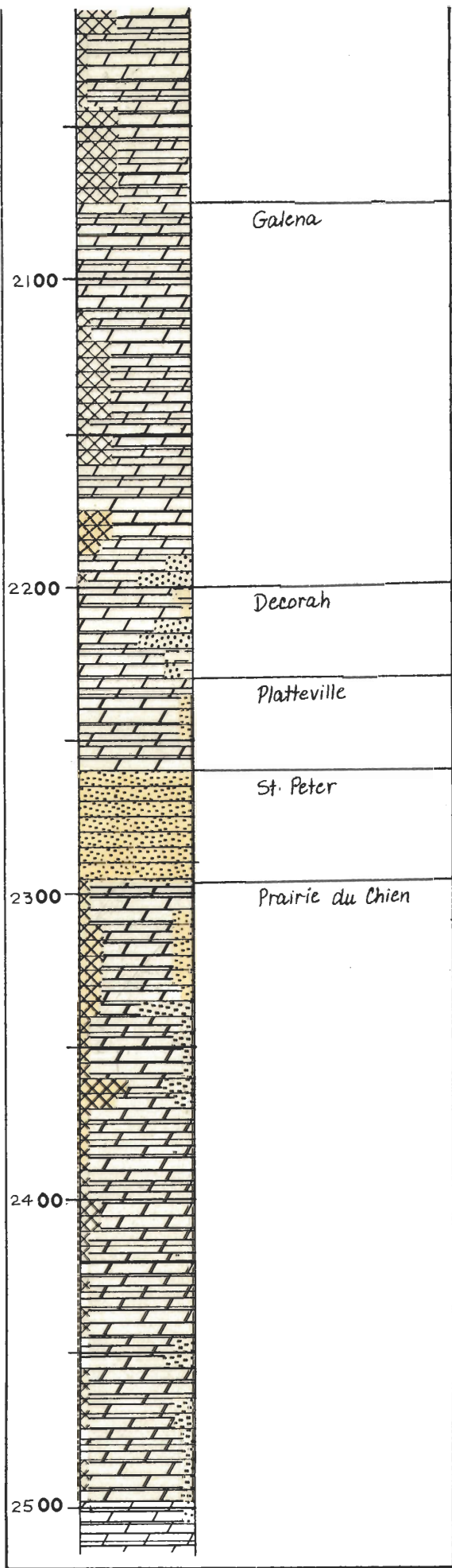
Name <i>Leon City Well #4</i>		State <i>Iowa</i>
Town <i>Leon</i>	County <i>Decatur</i>	Loc. <i>SW, SE, SE, SE</i>
Contractor <i>Thorpe Well Company</i>		Driller <i>Thorpe Well Company</i>
Drilling Dates <i>March 28 - Sept. 25, 1963</i>		Sec. <i>29</i>
Casing Record		T. N., R. <i>69 N. 25 W.</i>
S.W.L. <i>395'</i>		G.P.M. <i>307</i>
D.D. <i>89'</i>		
<i>Main water from Prairie du Chien</i>		
Remarks <i>Well was acidized</i>		Elev. <i>1106'</i>
Logged By		T.D. <i>2853'</i>
		I.G.S. No. <i>W-14387</i>

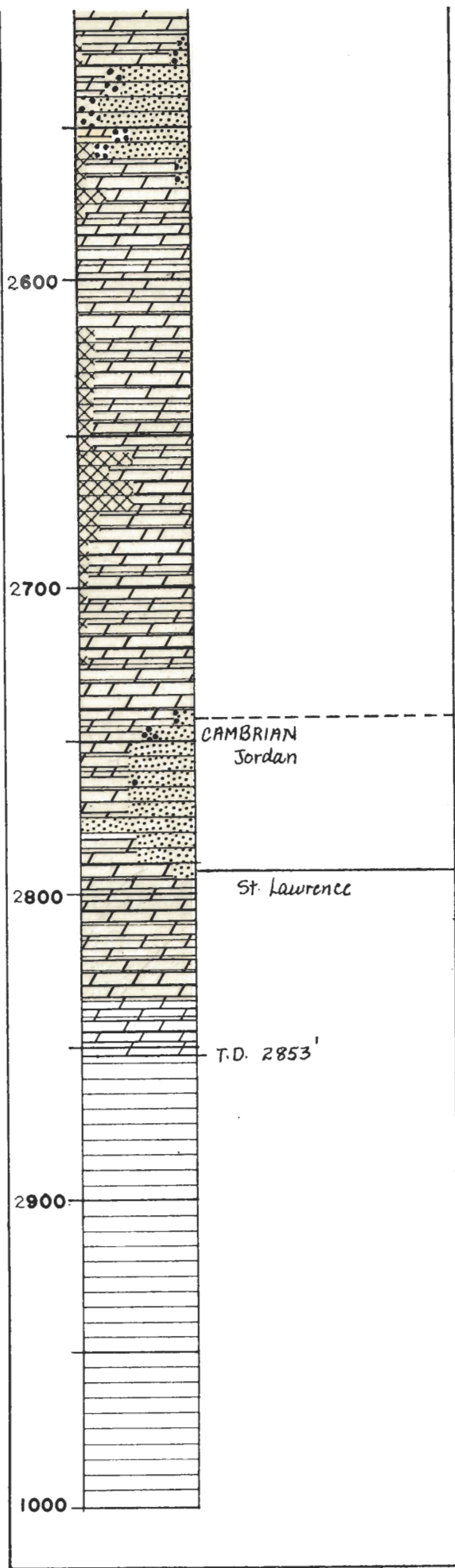
- Explanation of Colors
- Soil
  - Loess, Silt on Siltstone
  - Drift
  - Sand & Gravel
  - Shale
  - Sandstone
  - Limestone
  - Dolomite
  - Chert
  - Gypsum or Anhydrite
  - Coal
  - No Samples

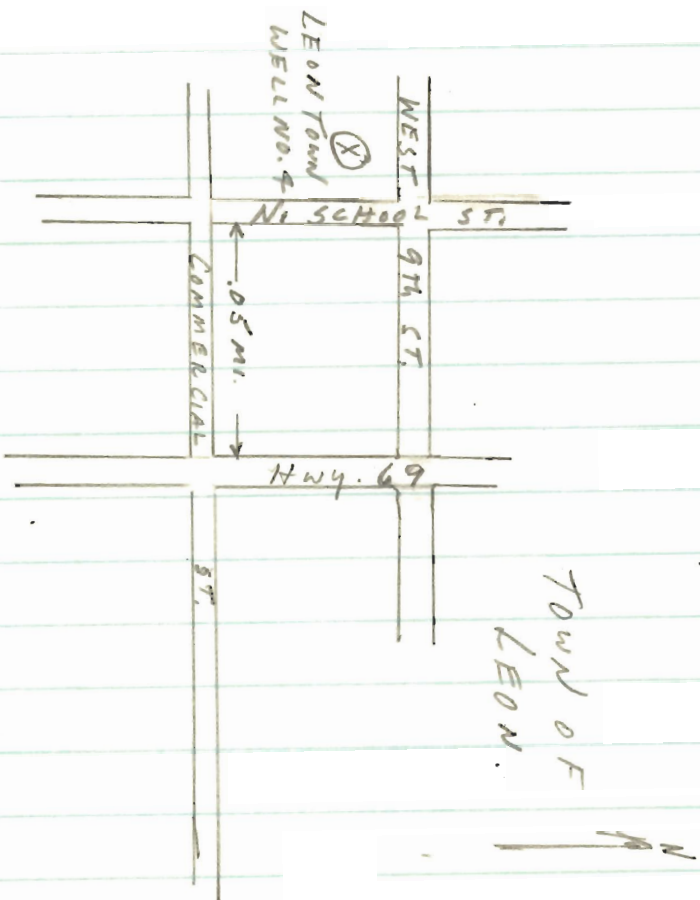












LOCATION SKETCH SHOWING LEON TOWN WELL NO. 4 (by Tom Eagle 5-26-72)

Location is SW, SE, SE, SE, SE, S. 29, T. 69N, R. 25W.