THORPE WELL COMPANY

2340 SIXTH AVENUE
DES MOINES, IOWA

Drilled for City of State Center at State Center, Iowa
Across street north of light plant

Well is located ____ miles N-E-S-W and ____ miles N-E-S-W from ____

in the ____ ¼ ____ ¼ Section ____ Township ____ Range ____

Drilling started August 10 19 56 Completed November 30 19 57
Deep Well

Well No. 2 Kind of Well Drilled Depth 3307' Size hole started 30 in.

Finish 6 G. P. M. ____ Static Head ____ Pumping level from surface ____

Water was first encountered at ____ in ____ Approx. Amt. ____ Temp. ____

Remarks ____

(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
26"	186'-8"	186'-8"	Surface		54	5
24"		230'	Surface		30	186'-8"
16"		708'	Surface			
14"	254'-3"	1237'	991'-9"			
10"		1940'	690			
8"	110'-10"	2679'	2568'-2"			
6"	190'-2"	2837'	2646'-10"			

Driller Cecil Allen From Surface to 3307' feet

Driller Arthur Lambertz From ____ feet to ____ feet

Driller Clarence Needs From ____ feet to ____ feet

AMOUNT IN FEET	KIND OF SOIL OR FORMATION (BE SPECIFIC)	TOTAL DEPTH FEET
12	Yellow clay	12

12 37
2 54
19 25

24"		230'	Surface		30	186'-8"
16"		708'	Surface			
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Driller Cecil Allen From Surface to 3307' feet

Driller Arthur Lamberts From ____ feet to ____ feet

Driller Clarence Needs From ____ feet to ____ feet

AMOUNT IN FEET	KIND OF SOIL OR FORMATION (BE SPECIFIC)	TOTAL DEPTH FEET
12	Yellow clay	12
2	Brown clay	14
16	Gray clay	30
18	Yellow clay	48
4	Rocks	52
10'-6"	Yellow clay	62 1/2
30'-6"	Blue clay - sandy - boulders 90 to 93	93
33	Blue clay - sandy	126
9	Rocks	135
31	Blue clay - sandy	166
1	Black shale	167
36	Gray shale	203
9	Lime & shale	212
20	Brown lime	232
13	Lime	245

39	Lime & shale streaks	284
6	Lime	290
214	Lime and shale streaked	504
5	Lime and shale streked	509
61	Green-gray shale	570
10	Gray lime	580
50	Gray shale	630
49	Lime - hard	679
37	Lime	715
45	Lime & shale streaks	760
130	Lime - gray, brown - white	890
22	White lime	912
238	Lime - gray, brown & white	1150
36	Gypsum	1186
4	Lime - brown	1190
3	Red shale	1193
97	Red shale chert - sandy lime	1290
133	Green - gray shale	1423
40	Brown shale	1463
119	Brown lime	1582
182	Brown lime - hard	1764
	Water dropped from 185 to 210 between 1764 and 1779	
16	Brown lime	1780
4	Green shale and lime	1784
37	Brown lime - hard	1821
3	Green shale	1824
41	Sand	1865
	Water level 220	
5	Sanyd lime	1870
78	Brown lime crevice with brown clay	1948
100	Brown lime	2048
87	Brown lime - sandy	2135
27	Sandstone	2162
	Water head 314 at 2219	
153	Brown lime	2315
60	Sandstone	2375
82	Brown lime	2457
18	Gray lime	2475
	End of contract 2475 tested	
	Static 242 at 2523	
122	Gray lime	2597
35	Gray lime - some gray shale	2632

37	Brown lime - hard	1821
3	Green shale	1824
41	Sand	1865
	Water level 220	
5	Sanyd lime	1870
78	Brown lime crevice with brown clay	1948
100	Brown lime	2048
87	Brown lime - sandy	2135
27	Sandstone	2162
	Water head 314 at 2219	
153	Brown lime	2315
60	Sandstone	2375
82	Brown lime	2457
18	Gray lime	2475
	End of contract 2475 tested	
	Static 242 at 2523	
122	Gray lime	2597
35	Gray lime - some gray shale	2632
53	Shale - gray & green - streaks of	2685
65	Green shale and sand streaks	2750
48	Brown shale - sandy	2798
39	Lime little shale	2837
4	Lime - hard	2841
72	Lime - little shale	2913
13	Lime - hard	2926
37	Lime - shale streaks	2963
14	Brown sand	2977
57	Brown clay and sand	3034
14	Sandstone	3048
	Water head 232	
232	Pink sand sharp	3280
27	Pink sand - red shale	3307

Approved Correct—

J. Wesley Rogers

Operations Mgr.