

Record of a Deep Well at Toronto, Woodson County.

PLATE XXIX.

Drilled by James Amm on the Robert Semple farm during the fall of 1895.
Reported by Mr. Troxel.

MATERIAL.		Thickness of Strata.	Depth to Bottom of Strata.
1	Soil and Clay	26 feet.....	26 feet.
2	Gravel.....	5 "	31 "
3	Soapstone Shale	79 "	110 "
4	Limestone	5 "	115 "
5	Soapstone Shale	6 "	121 "
6	Shale.....	30 "	151 "
7	Soft Slate Shale	104 "	255 "
8	Limestone	65 "	320 "
9	Shale.....	16 "	336 "
10	Brown Limestone.....	19 "	355 "
11	Limestone, Shale and Shells	53 "	408 "
12	Light Shale.....	90 "	498 "
13	Limestone, water.....	58 "	556 "
14	Shale.....	10 "	566 "
15	Limestone	15 "	581 "
16	Shale.....	27 "	608 "
17	Limestone	44 "	652 "
18	Brown Limestone, water.....	20 "	672 "
19	Dark Shale.....	3 "	675 "
20	Limestone	15 "	690 "
21	Shale.....	10 "	700 "
22	Limestone	24 "	724 "
23	Black Shale, water.....	5 "	729 "
24	Limestone	19 "	748 "
25	Gray Sandstone.....	15 "	763 "
26	Shale.....	3 "	766 "
27	Gray Sandstone.....	18 "	784 "
28	Blue Shale.....	85 "	869 "
29	Dark Shale.....	30 "	899 "
30	Light Shale.....	16 "	915 "
31	Limestone	18 "	933 "
32	Shale.....	72 "	1,005 "
33	Limestone	4 "	1,009 "
34	Shale	3 "	1,012 "
35	Limestone	14 "	1,026 "
36	Shale.....	6 "	1,032 "
37	Limestone	48 "	1,080 "
38	Dark Shale.....	24 "	1,104 "
39	Oil Sand	25 "	1,129 "
40	Shale.....	11 "	1,140 "
41	Shale.....	110 "	1,250 "
42	Soft Sandstone.....	4 "	1,254 "
43	Shale.....	86 "	1,340 "
44	Soft Sandstone.....	7 "	1,347 "
45	Shale.....	83 "	1,430 "
46	Soft Sandstone.....	8 "	1,438 "
47	Shale.....	14 "	1,452 "

Record of a Deep Well at Howard, Elk County.

PLATE XXIX.

MATERIAL.		Thickness of Strata.	Depth to Bottom of Strata.
1	Soil.....	5 feet.....	5 feet.
2	Limestone	10 "	15 "
3	Shale.....	26 "	41 "
4	Limestone	38 "	77 "
5	Shale.....	30 "	107 "
6	Limestone	8 "	115 "
7	Shale.....	2 "	117 "
8	Limestone	14 "	131 "
9	Shale.....	16 "	147 "
10	Limestone	33 "	180 "
11	Shale and Sandy Shale.....	35 "	215 "
12	Limestone	11 "	226 "
13	Shale, some Sandy Shale.....	140 "	366 "
14	Limestone	17 "	383 "
15	Shale and Coal.....	49 "	432 "
16	Limestone	19 "	451 "
17	Shale.....		
18	COAL.....		
19	Shale.....		
20	COAL.....		
21	Shale.....		655 feet.
22	Limestone	5 feet.....	660 "
23	Shale.....	72 "	732 "
24	Limestone	5 "	737 "
25	Shale.....	65 "	802 "
26	Limestone	30 "	832 "
27	Shale.....	3 "	835 "
28	Limestone	154 "	989 "
29	Shale.....	3 "	992 "
30	Limestone	3 "	995 "
31	Shale.....	121 "	1,116 "
32	Limestone	20 "	1,136 "
33	Shale.....	48 "	1,184 "
34	Limestone	10 "	1,194 "
35	Shale.....	16 "	1,210 "
36	Limestone	16 "	1,226 "

Figure 1.

Figure 2.

TORONTO WELL.

HOWARD WELL.

