

E. J.

RICHMOND NO. 1 WELL.

70135
U.S.G.S. Card.

Sand Hill District, Marshall County, W. Va.

By Virginia Oil & Gas Co.

Dry hole.

Completed May 14, 1904.

Authority, Wm. Shaffer, Secy.

Conductor, 20'.

Record from U. S. Geological Survey, April 8, 1939.

	Thickness.	Top.	Bottom.
Limestone (conductor, 20')	10	20	- 30
Slate	5	30	- 35
Limestone and water	11	35	- 46
Black slate	20	46	- 66
Hard white limestone	30	66	- 96
Black slate	20	96	- 116
Limestone and slate	20	116	- 136
Hard limestone	23	136	- 159
Slate	6	159	- 165
Coal	3	165	- 168
Slate	20	168	- 188
Slate and hard limestone	30	188	- 218
Limestone	24	218	- 242
Hard limestone	20	242	- 262
Slate	13	262	- 275
Hard limestone	5	275	- 280
Pittsburgh Coal and gas	7	280	- 287
Slate	13	287	- 300
Hard limestone	30	300	- 330
Red rock	5	330	- 335
Slate	15	335	- 350
Hard limestone	10	350	- 360
Red rock	10	360	- 370
Slate	30	370	- 400
Hard limestone	10	400	- 410
Red rock	5	410	- 415
Slate	20	415	- 435
Limestone	15	435	- 450
Slate	30	450	- 480
Red rock	5	480	- 485
Slate	55	485	- 540
Red rock	10	540	- 550
Slate	40	550	- 590
Slate and shells	20	590	- 610
White sandstone	(5?) 25	610	- 615
Slate	5	615	- 620
Coal and gas	3	620	- 623
Slate	17	623	- 640
Limestone	5	640	- 645
Slate	20	645	- 665
Red rock	10	665	- 675
Limestone	10	675	- 685
Slate	65	685	- 750
Limestone and shells	15	750	- 765
1st Dunkard Sand	30	765	- 795
Slate	5	795	- 800
Sandstone	10	800	- 810
Shells	15	810	- 825

RICHMOND NO. 1 WELL (Continued).

	Thickness.	Top.	Bottom.
White sandstone	20	825	845
Slate	5	845	850
Sandstone	25	850	875
Slate	5	875	880
Coal and gas	3	880	883
Slate	7	883	890
Hard limestone	10	890	900
Slate	10	900	910
Sandstone	10	910	920
Limestone	15	920	935
Sandstone	15	935	950
Slate	10	950	960
Big Dunkard Sand	20	960	980
Slate	7	980	987
Hard sandstone and salt water, enough to drill with	16	987	1003
Slate	16	1003	1020
Hard limestone	5	1020	1025
Slate	42	1025	1067
Black sandstone	5	1067	1072
Slate	78	1072	1150
Salt Sand	30	1150	1180
Slate	20	1180	1200
Slate and shells	20	1200	1220
Black sandstone	10	1220	1230
Shells	30	1230	1260
Slate	10	1260	1270
White sandstone	25	1270	1295
Slate and shells	20	1295	1315
Limestone and sandstone	40	1315	1355
Black slate	50	1355	1405
Big Lime, sandy	10	1405	1415
Slate	15	1415	1430
Big Injun Sand, hard and pebbly	40	1430	1470
Break, shells	30	1470	1500
Sandstone	70	1500	1570
Slate	70	1570	1640
Shells, sandy	40	1640	1680
Break, shells	20	1680	1700
Slate (6 1/2" casing, 1725')	25	1700	1725
Slate	75	1725	1800
Limestone	15	1800	1815
Slate	50	1815	1865
Hard limestone	20	1865	1885
Slate	15	1885	1900
Shelly limestone	25	1900	1925
Hard limestone, sandy	5	1925	1930
Berea Grit	4	1930	1934
Slate	50	1934	1984
Limestone and slate	16	1984	2000
Slate	40	2000	2040
Red rock	10	2040	2050
Shells	30	2050	2080
Slate	20	2080	2100

	Thickness.	Top.	Bottom.
White slate	25	2100	2125
Slate	8	2125	2133
Gas sand pay	3	2133	2136
Slate	6	2136	2142
Slate?	98	2142	2240
Limestone and sandstone, pebbly	40	2240	2280
Hard white sandstone	30	2280	2310
Shells	30	2310	2340
Red rock	5	2340	2345
Shells and slate	95	2345	2440
Stray Sand	15	2440	2455
Gordon Sand	30	2455	2485
Slate	35	2485	2520
Red rock	50	2520	2570
Break, shells	7	2570	2577
Limestone and shells	10	2577	2587
Fifth Sand, hard, black	10	2587	2597
Slate	6	2597	2603

Gas sand too thin to shoot.

(CONTINUED NEXT COLUMN)

Sand Hill District, Marshall County, W. Va.
 By Virginia Oil & Gas Co.
 On Crow Creek, near Majorsville.
 Elevation.....

	Thickness.	Total.
Gravel	20 -	20
Lime	10 -	30
Slate	5 -	35
Lime (water)	11 -	46
Black slate	20 -	66
White lime (hard)	30 -	96
Black slate	20 -	116
Lime and slate	20 -	136
Lime, (hard)	23 -	159
Slate	6 -	165
Coal	3 -	168
Slate	20 -	188
Slate and hard lime	30 -	218
Lime	25 -	243
Lime, hard	19 -	262
Slate	13 -	275
Lime, hard	5 -	280
Pittsburgh Coal (gas)	7 -	287
Slate	13 -	300
Lime	30 -	330
Red rock	5 -	335
Slate	15 -	350
Lime, (hard)	10 -	360
Red rock	10 -	370
Slate	30 -	400
Lime, (hard)	10 -	410
Red rock	5 -	415
Slate	20 -	435
Lime	15 -	450
Slate	30 -	480
Red rock	5 -	485
Slate	55 -	540
Red rock	10 -	550
Slate	40 -	590
Slate and lime	30 -	610
Sandstone, white	5 -	615
Slate	5 -	620
Coal, Bakerstown (gas)	3 -	623
Slate	17 -	640
Lime	5 -	645
Slate	20 -	665
Red rock	10 -	675
Lime	10 -	685
Slate	65 -	750
Lime and shells	15 -	765
Sandstone, white (Dunkard, Upper Mahoning)	30 -	795
Slate	5 -	800
Sandstone	10 -	810
Shells	15 -	825
Sandstone, white (Lower Mahoning)	20 -	845
Slate	5 -	850

(OVER)

E. J. RICHMOND NO. 1 WELL (Continued).

	Thickness.	Total.
Sandstone	25 -	875
Slate	5 -	880
Coal, (Lower Freeport). (gas).....	3 -	883
Slate	7 -	890
Lime, (hard)	10 -	900
Slate	10 -	910
Sandstone	10 -	920
Lime	15 -	935
Sandstone	15 -	950
Slate	10 -	960
Sandstone	20 -	980
Slate	7 -	987
Sand, hard (some salt water) (Gas Sand)	16 -	1003
Slate	17 -	1020
Shells	5 -	1025
Slate	42 -	1067
Sandstone, (black)	5 -	1072
Slate	78 -	1150
Sand, (Maxton? of Geo. P. Selmar well)	30 -	1180
Slate	20 -	1200
Slate and shells	20 -	1220
Sandstone, black	10 -	1230
Shells	30 -	1260
Slate	10 -	1270
Sandstone, white (base of Pottsville)	25 -	1295
Slate and shells	20 -	1315
Lime and sandstone (probably true Maxton Sand)	40 -	1355
Slate, black	50 -	1405
Big Lime, (sandy)	10 -	1415
Slate	15 -	1430
Big Injun Sand, hard and pebbly	40 -	1470
Shells	30 -	1500
Sandstone (base of Big Injun)	70 -	1570
Slate	70 -	1640
Shells and sandy	40 -	1680
Shale, black	20 -	1700
Slate	100 -	1800
Lime	15 -	1815
Slate	50 -	1865
Lime, hard	20 -	1885
Slate	15 -	1900
Lime, (shelly)	25 -	1925
Lime, (hard and sandy)	5 -	1930
Berea Grit?	4 -	1934
Slate	50 -	1984
Lime and slate	15 -	2000
Slate	40 -	2040
Red rock	10 -	2050
Shells	30 -	2080
Slate	20 -	2100
White slate	25 -	2125
Slate, black	8 -	2133
Sand, (gas, plenty)	3 -	2136
Slate	6 -	2142

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E. J. RICHMOND NO. 1 WELL (Continued).

	Thickness.	Total.
Slate	98	- 2240
Lime and pebbly sandstone) Stray and	40	- 2280
White sandstone, hard) Gordon (30	- 2310
Shells	30	- 2340
Red rock	5	- 2345
Shells and slate	95	- 2440
Fifth Sand (thin break at 2445')	45	- 2485
Slate	35	- 2520
Red rock	50	- 2570
Shells, black	7	- 2577
Lime and shells	10	- 2587
Bayard Sand, hard, dark	10	- 2597
Slate, to bottom	6	- 2603

"The sand struck at 987 feet in this well, and holding some salt water, is apparently the gas sand of the wells three miles southeast from Elm Grove, since its top comes at 700 feet below the Pittsburgh Coal, but its position, 1413 feet above the top of the Big Injun Sand struck at 1,430 feet in this well, puts the horizon in the Allegheny Formation instead of in the Salt Sand (Pottsville), whose base appears to come at 1,295 feet. If the gas horizon, 700 feet under the Pittsburgh Coal, is also in the Pottsville, this would make that formation 300 feet thick in this region, which appears excessive, compared with the Allegheny, whose top must have been struck at 845 feet, since that is only 160 feet below the lowest red bed of the record. This interpretation would give the Conemaugh Formation a thickness of 558 feet, which is in close agreement with the results obtained in contiguous regions."

Quotation on page 375, M-W-T Report, from Vol. I(a), pp.227-9.