

Union District, Kanawha County, W. Va.

By E. F. Bess & Co.

Drilled under permit Kan-110.

4.7 mi. N. W. of mouth of Elk River at Charleston, on west side of branch of Left Fork of Twomile Creek, 1 mi. N. W. of road fork at Guthrie.

Commenced August 25, 1931.

Drillers, R. F. Schaffer, O. J. White.

Tool Dressers, R. M. Schaffer, D. A. Schaffer.

Elevation, 645' (652'?).

10" casing, 15'; 8 1/2", 119'; 6-7/8", 1777'.

*5.6 S 38° 30'
0.18 W 81° 40'
Charleston Road
NW*

	Top.	Bottom.
Soil	0	5
Sand and gravel	5	15
Sand	15	30
Red rock	30	40
Slate	40	130
White sand (sand very hard and water at 150')	130	175
Gray shale	175	300
Black slate	300	315
White sand	315	380
Slate	380	400
Sand (gas at 480') (show oil, 400-490')	400	490
Black shale	490	505
Gray sand (gas at 580')	505	590
Blue slate	590	675
Slate and shells	675	760
Blue shale	760	785
Slate and shell	785	825
Sand	825	915
Slate	915	917
Salt Sand (water, 1005') (sand very hard, 1130')	917	1130
Slate	1130	1135
Sand	1135	1370
Slate	1370	1390
Brown shale	1390	1410
Lime	1410	1430
Sand (sand full of pebbles at 1485')	1430	1485
Slate	1485	1490
Little Lime	1490	1522
Pencil Cave	1522	1525
Big Lime	1525	1705
Big Injun Sand	1705	1742
Lime shell	1742	1750
Squaw Sand	1750	1772
Lime shells	1772	1822
Black slate	1822	1940
Weir shells	1940	2010
Weir Sand (first oil, 2020')	2010	2156
Blue slate	2156	2176
Brown shale	2176	2186
Berea Sand	2186	2228
Sandy shell (show of gas at 2960')	2228	2980
Gray shale	2980	3240
Lime shells	3240	3420



VIRGIL C. TATE NO. 1 WELL (Continued).

	Top.	Bottom.
First brown shale	3420	- 3460
lime shells	3460	- 3770
Brown shale (1/10" ... in 1" at 4010')	3770	- 4020
White lime shells, very dark	4020	- 4395
Brown shale	4395	- 4575
Brown lime shale (gas, 4576')	4575	- 4668
Gray lime shell	4668	- 4676
Slate	4676	- 4698
Brown shale, bad cave	4698	- 4745
Corniferous lime (small break at 4845')	4745	-
Oriskany Sand (drilled 3' in sand, very hard) (show of oil, 4783-4785')///	4845	- 4848

Well reported taken over by Veleari G. Smith, Charleston, W. Va.,
for deepening.

4745	4845
652	652
<hr/> 4093	<hr/> 4193

.....District, Kanawha County, W. Va.

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(OVER)

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Brown lime shale (gas at 4576')	4575	- 4668
Gray lime shell	4668	- 4676
Slate	4676	- 4698
Brown shale (bad cave)	4698	- 4745
Corniferous Lime (show of oil, 4783-5')	4745	
Small break at	4845	
Oriskany Sand (very hard) (drilled 3'in)	4845	- 4848