

UNION DISTRICT.

Union district lies west of Poca and extends to the Kanawha river on the south. The Guthrie syncline extends in a northwest direction for a short distance into the southeastern part of the district, but as in Poca district no great geological disturbance has taken place therein, but several small crumples occur south of Pocatalico river

In the last few years several tests have been made by different companies for oil and gas in this district, but thus far no wells of economic value have been found. The following is the record of one of these tests:

J. W. Franklin Well Record (612).

Located in Union district, $2\frac{1}{4}$ miles northwest of Sattes. Completed, 1910. Authority, Carter Oil Company. Elevation 770' A. T. B.

| | Thickness Feet. | Total Feet. |
|--------------------------|--------------------|----------------|
| Dirt | 10 | 10 |
| Sand | 25 | 35 |
| Red rock | 15 | 50 |
| Sand | 10 | 60 |
| Red rock | 20 | 80 |
| Slate | 5 | 85 |
| Red rock | 30 | 115 |
| Sand | 10 | 125 |
| White slate | 3 | 128 |
| Red rock | 4 | 132 |
| Sand | 3 | 135 |
| Lime | 5 | 140 |
| White slate | 45 | 185 |
| Red rock | 10 | 195 |
| Slate | 40 | 235 |
| Red rock | 10 | 245 |
| Slate | 15 | 260 |
| Sand | 25 | 285 |
| Coal (Bakerstown?) | 1 | 286 |
| Black slate | 14 | 300 |
| Red rock | 5 | 305 |
| Slate | 5 | 310 |
| Lime | 5 | 315 |
| Slate | 25 | 340 |
| Sand | 25 | 365 |
| Slate | 10 | 375 |
| Sand | 65 | 440 |
| Slate | 30 | 470 |
| Sand | 15 | 485 |
| Brown slate | 12 | 497 |

| | Thickness Feet. | Total Feet. |
|-----------------------|--------------------|----------------|
| Sand (?) | 503 | 1000 |
| Slate | 5 | 1005 |
| Sand | 35 | 1040 |
| Slate | 25 | 1065 |
| Third Salt sand | 470 | 1535 |
| Little Lime | 5 | 1540 |
| Pencil cave | 5 | 1545 |
| Big Lime | 163 | 1708 |
| Keener sand | 10 | 1718 |
| Slate | 12 | 1730 |
| Big Injun sand | 55 | 1785 |
| Slate | 400 | 2185 |
| Brown shale | 18 | 2203 |
| Berea Grit | 18 | 2221 |
| Slate | 8 | 2229 |

"2 bailers of water at 20'; 3 bailers of water 532'; 5 bailers of water, 538'; 2 bailers of water, 1070'; 4 bailers of water, 1080'; 6 bailers water, 1090'; hole full of water, 1105'; 3 bailers water, 1740'; show of oil, 1780'; show of oil, 2221'. Well dry and abandoned."

Charles Rust Heirs Well Record. (618)

Located 5½ miles northeast of Sattes, Union district, starting 250 feet below Pittsburgh coal horizon. Authority, Guffy & Galey, Pittsburgh, Pa. Completed, 1910. Elevation, 640' A. T. B.

| | Thickness Feet. | Total Feet. |
|------------------------------|--------------------|----------------|
| Loose earth | 30 | 30 |
| Slate and shales | 190 | 220 |
| Sand, Buffalo | 80 | 300 |
| Slate | 60 | 360 |
| Sand, East Lynn | 130 | 490 |
| Slate | 20 | 510 |
| Sand | 15 | 525 |
| Slate | 20 | 545 |
| Sand | 105 | 650 |
| Slate | 70 | 720 |
| Sand | 15 | 735 |
| Slate | 15 | 750 |
| Sand. Second Salt sand | 40 | 790 |
| Slate | 245 | 1035 |
| Sand, Third Salt sand | 165 | 1200 |
| Black lime | 20 | 1220 |
| Slate | 100 | 1320 |
| Sand, Maxton | 80 | 1400 |
| Black lime | 15 | 1415 |
| Big Lime | 185 | 1600 |
| Slate | 10 | 1610 |
| Big Injun sand | 54 | 1664 |