

LATITUDE

38 45

81 12 00

LONGITUDE

→ 0635
75110c

7'5 OGIS topo location

7.5' loc 6.945
7.670

15' loc 2.745
(calc.) 3.920

Company _____

Farm _____

Quad Tariff Otter mdw

County _____

District Smithfield

WELL LOCATION MAP

File No. Reane 131

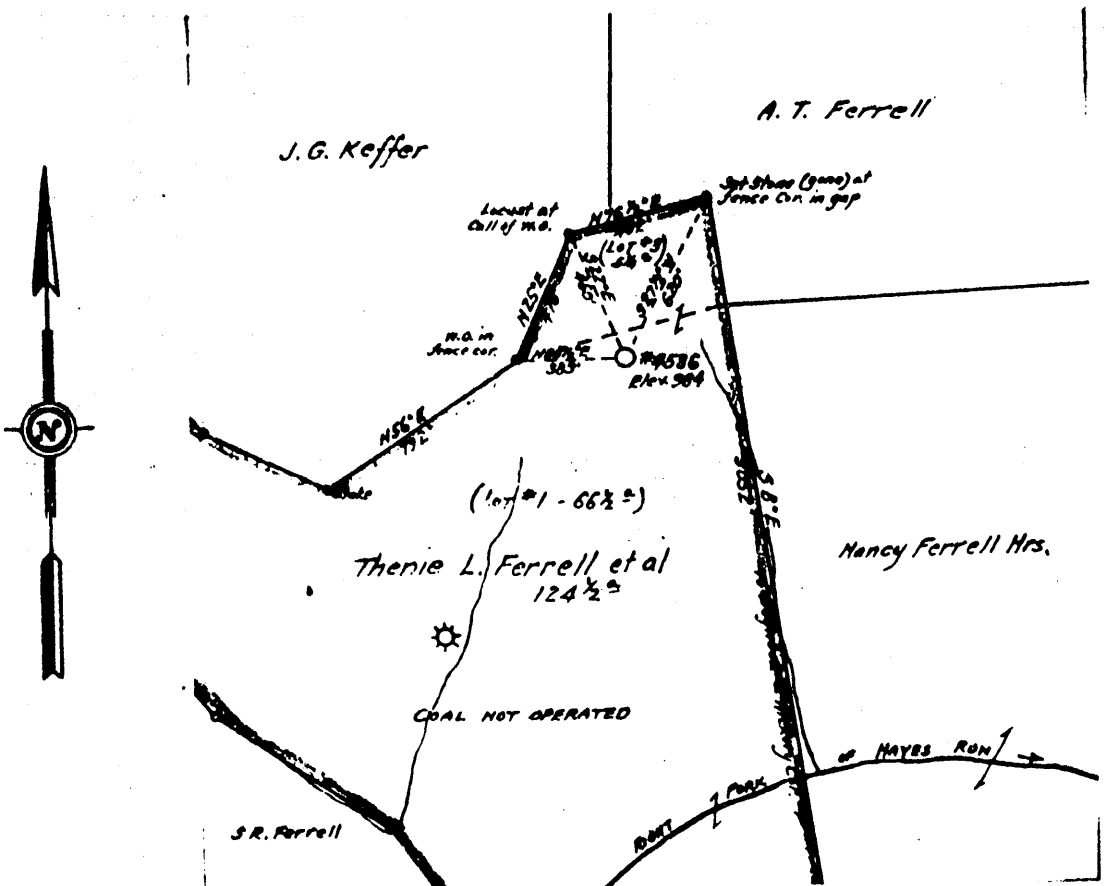
I, the undersigned, hereby certify that this map is correct and shows all the information to the best of my knowledge and belief, required by the Oil and Gas Section of the Mining Laws of West Virginia.

G.A. Cunningham
Engineer

Acknowledged before me, a Notary Public of Kanawha County, W.Va.

This 13 day of September 1934.

My Commission expires May 2, 1940 J. J. Martin



Thenie L. Ferrell et al
Well No. 4536
Smithfield District
Roane County, W. Va.
Sept. 13, 1934

Roane 131

UNITED FUEL GAS CO.
MAP SHOWING
PROPOSED WELL LOCATION
SCALE :- 1 INCH = 660 FEET

THEMIS L. FERRELL NO. 4536 WELL.

Not located.

Smithfield District, Roane County, W. Va.

United Fuel Gas Co.

On 125 acres, surface and mineral rights owned by Themis L. Ferrell
et al., First National Bank, Spencer, W. Va.

Drilled under permit Roa-131, issued Sept. 24, 1934.

Elevation, 984' E.

6-5/8" casing, 1884'.

Anchor packer, 3 x 5-3/16 x 16, set at 1968'.

Casing perforated at 2045-2054 and 1994-2005'.

No coal encountered.

Completion reported to Dept. of Mines, Jan. 10, 1935.

Well was shot at 1994', 20 qts.

Salt water, hole full, at 1600'.

190,000 cu. ft. gas.

| | Top | Bottom |
|--------------------------------------|------|--------|
| Earth | 0 | 15 |
| Red clay | 15 | 80 |
| Blue clay | 80 | 150 |
| Red rock | 150 | 175 |
| White slate | 175 | 215 |
| Sand (water, 242') | 215 | 245 |
| Slate and shells (water, 290') | 245 | 380 |
| Red rock | 380 | 400 |
| Slate and shells | 400 | 435 |
| Red rock | 435 | 480 |
| Slate and shells | 480 | 600 |
| Red rock | 600 | 670 |
| Slate and shells | 670 | 790 |
| Sand | 790 | 890 |
| Slate | 890 | 970 |
| Sand | 970 | 1000 |
| Slate and shells | 1000 | 1090 |
| Sand | 1090 | 1120 |
| Slate and shells | 1120 | 1500 |
| Salt Sand (gas, 1560'; water, 1600') | 1500 | 1775 |
| Slate | 1775 | 1780 |
| Marion Sand | 1780 | 1810 |
| Slate | 1810 | 1815 |
| Little Lime | 1815 | 1864 |
| Pencil Cove | 1864 | 1874 |
| Big Lime (oil and gas, 1930-1933') | 1874 | 1983 |
| Big Injun Sand (gas, 1994-2004') | 1983 | 2010 |
| Slate | 2010 | 2053 |
| Total depth (SLM) | | 2054 |

Roane-131

WEST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS DIVISION

PRELIMINARY DATA SHEET NO. 1

File No. Roane 131,

Well No. 4536

UNITED FUEL GAS Company of Charleston, W. Va.,
Well 4536, on the Thenie L. Ferrell Farm
containing 125 acres. Location Smithfield District, in Roane County, West Virginia

The surface of the above tract is owned in fee by Thenie L. Ferrell et al,
of c/o 1st National Bank, Spencer, W. Va., address, and the mineral rights are owned by
Thenie L. Ferrell et al of Spencer, W. Va.,

The oil and gas privileges are held under lease by the above named company, and this well is drilled under permit
No. Roane 131, issued by the West Virginia Department of Mines, Oil and Gas Division
September 24th 1934.

Elevation of surface at top of well, 984 Spirit Barometric.

The number of feet of the different sized casings used in the well.

1884 feet 6-5/8" size, csg. 1884 feet 6-5/8" size, csg.
feet size, csg. feet size, csg.
feet size, csg. feet size, csg.

Anchor packer of 8"x5-3/16"x16" size, set at 1968
packer of size, set at

, in casing perforated at 2045 feet to 2054 feet.
, in casing perforated at 1994 feet to 2005 feet.

Coal was encountered at No Coal feet, thickness inches, and at
feet; thickness inches; and at feet; thickness inches.

Linera were used as follows: (Give details)

November 19th, 1935. Date.

Approved UNITED FUEL GAS COMPANY, Owner.
By J.A. Cunningham (TITLE) Engineer

Row-131

UNITED FUEL GAS Company

Charleston, W. Va., Address

COMPLETION DATA SHEET

No. 2

FORMATION RECORD

Well No. 4536,

| Name | Color | Character | Oil, Gas or Water | Top | Bottom | Thickness | Total Depth | Remarks |
|----------------|-----------|-----------|-------------------|------|--------|-----------|-------------|---------|
| Earth | | | | 0 | 15 | 15 | | |
| Red Clay | | | | 15 | 80 | 65 | | |
| Blue Clay | | | | 80 | 150 | 70 | | |
| Red Rock | | | | 150 | 175 | 25 | | |
| White Slate | | | | 175 | 215 | 40 | | |
| Sand | | | | 215 | 245 | 30 | | |
| Slate & Shells | | | Water 290' | 245 | 380 | 135 | | |
| Red Rock | | | | 380 | 400 | 20 | | |
| Slate & Shells | | | | 400 | 435 | 35 | | |
| Red Rock | | | | 435 | 480 | 45 | | |
| Slate & Shells | | | | 480 | 600 | 120 | | |
| Red Rock | | | | 600 | 670 | 70 | | |
| Slate & Shells | | | | 670 | 790 | 120 | | |
| Sand | | | | 790 | 890 | 100 | | |
| Slate | | | | 890 | 970 | 80 | | |
| Sand | | | | 970 | 1000 | 30 | | |
| Slate & Shells | | | | 1000 | 1090 | 90 | | |
| Sand | | | | 1090 | 1120 | 30 | | |
| Slate & Shells | | | | 1120 | 1500 | 380 | | |
| Salt Sand | | | Gas 1560' | 1500 | 1775 | 275 | | |
| Slate | | | Water 1600' | 1775 | 1780 | 5 | | |
| Maxon Sand | | | | 1780 | 1810 | 30 | | |
| Slate | | | | 1810 | 1815 | 5 | | |
| Little Lime | | | | 1815 | 1864 | 49 | | |
| Pencil Cave | | | | 1864 | 1874 | 10 | | |
| Big Lime | | | | 1874 | 1983 | 109 | | |
| Big Injun Sand | | | | 1983 | 2010 | 27 | | |
| Gas | | | | 1994 | 2004 | 10 | | |
| Slate | | | | 2010 | 2053 | 43 | | |
| Total Depth | S.L.Meas. | | | | | | 2054 | |

Well was shot at 1992' - 2006' feet; well was shot at feet.

Fresh water at 242' & 290' feet; salt fresh water at 1600' feet.

Well was producing hole. 190,000 Cu. Ft.

November 19, 1935. Date

Approved UNITED FUEL GAS COMPANY Owner

NOTE: All bottom formations must be noted as indicated above and all key-rocks and oil and gas sands must be recorded under their proper geological names in the district as well as any local names commonly used in the district for such strata.