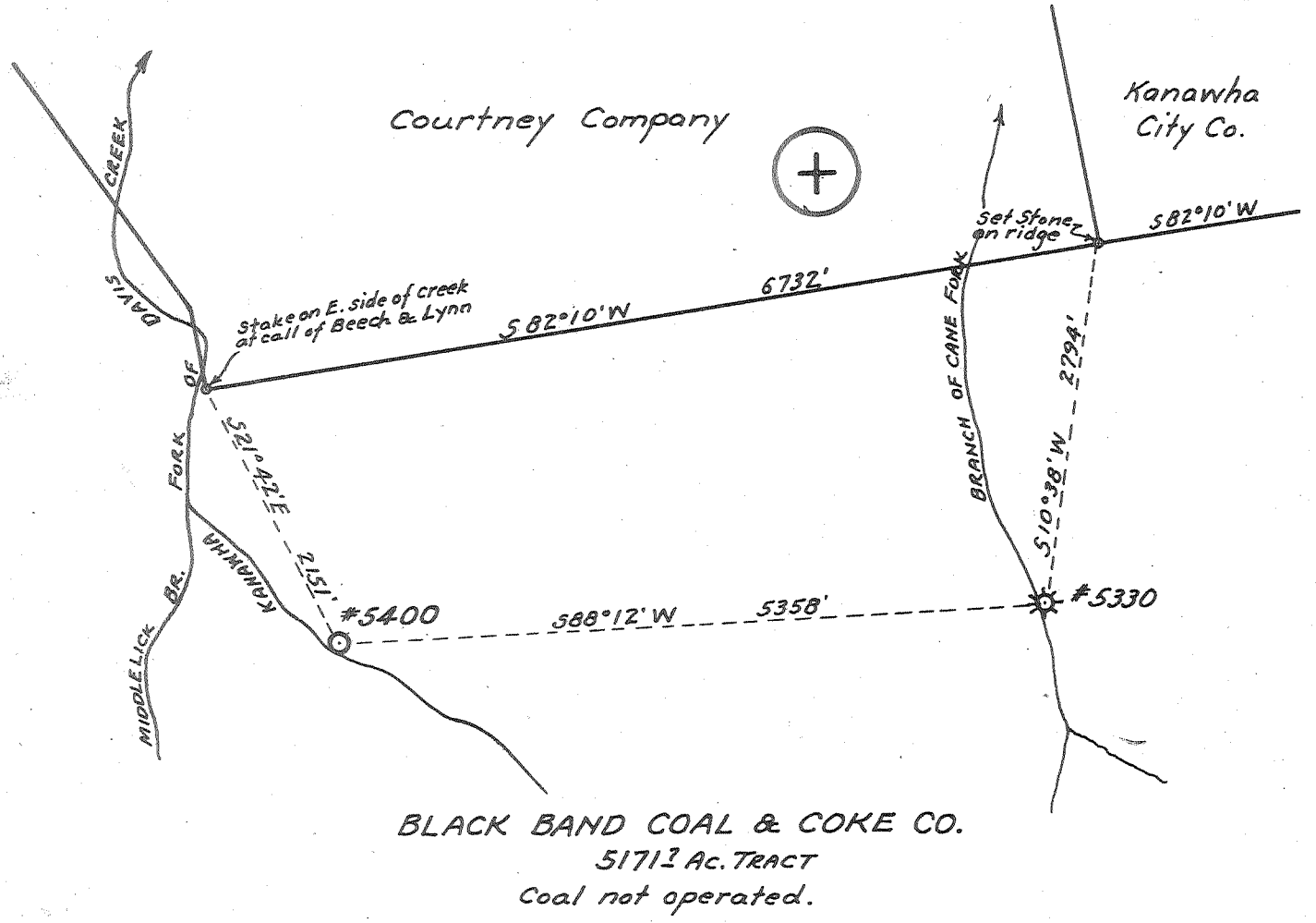


Latitude 38° 20' Longitude 81° 35'



New Location   
 Drill Deeper   
 Abandonment

8 SC (J-5)

REVISED LOCATION

~~2.78 W~~  
~~4.29 S~~

|                             |                                |
|-----------------------------|--------------------------------|
| Company                     | UNITED FUEL GAS CO.            |
| Address                     | CHARLESTON, W.VA.              |
| Farm                        | BLACK BAND COAL & COKE CO.     |
| Tract                       | Acres 12007.9 Lease No. 16715  |
| Well (Farm) No.             | 12 Serial No. 5400             |
| Elevation (Spirit Level)    | 781.12 BAROMETER               |
| Quadrangle                  | CHARLESTON - SC                |
| County                      | KANAWHA District LOUDON        |
| Engineer                    | G.A. Cunningham                |
| Engineer's Registration No. | 659                            |
| File No.                    | 60-53 Drawing No.              |
| Date                        | MAR. 29, 1944 Scale 1" = 1320' |

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON

WELL LOCATION MAP

FILE NO. KAN-1113-DRILL DEEPER  
 6-16-65

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

Samples 15-G 4494-4569' 60305  
 4569-5523' Deep Well

WEST VIRGINIA DEPARTMENT OF MINES  
OIL & GAS DIVISION  
W E L L R E C O R D

|                      |                                    |                       |
|----------------------|------------------------------------|-----------------------|
| Permit No. Kan. 1113 |                                    | Gas Well              |
| Charleston Quad.     |                                    | CASING & TUBING       |
| Company              | United Fuel Gas Company            |                       |
| Address              | Box 1273, Charleston, 25, W.Va.    | 16    25    25        |
| Farm                 | Black Pand C & C Co. A-12,008      | 13    165    165      |
| Location             | Kanawha Fork of Davis Creek        | 10    703    703      |
| Well No              | 5400    Elev. 768.25               | 8½    1201    1201    |
| District             | Loudon    Kanawha County           | 6 5/8    4439    4439 |
| Surface              |                                    | 2    4495             |
| Mineral              | Mrs. W.C. Hardy, Charleston, W.Va. |                       |
| Commenced            | 4-11-44                            |                       |
| Completed            | 8-1-44                             | Coal at 63' 48"       |
| Date shot            | 8-4-44 Depth 4519 to 4540 with     | 258' 48"              |
|                      | 40 qts. Gly.                       |                       |
| Volume               | Gas Well                           |                       |
| Salt Water           | 645'; 672' HFV                     |                       |

*Volume unknown 239 MCF*  
*805 ps rock I Prod data*  
*press Dam 6/22/94*

|                      |      |      |                               |      |      |
|----------------------|------|------|-------------------------------|------|------|
| Gravel               | 0    | 20   | Lime (Helderberg)             | 4535 | 4543 |
| Slate                | 20   | 35   | Sandy Lime                    | 4543 | 4563 |
| Black Sand           | 35   | 40   | Lime                          | 4563 | 4569 |
| Slate                | 40   | 63   | TOTAL DEPTH                   |      | 4569 |
| Coal                 | 63   | 67   |                               |      |      |
| Slate                | 67   | 254  | Oil 4549-4552 Oil show        |      |      |
| Gritty Lime          | 254  | 258  | Filled back for shot at 4544  |      |      |
| Coal                 | 258  | 262  |                               |      |      |
| Lime                 | 262  | 290  |                               |      |      |
| Slate                | 290  | 293  |                               |      |      |
| Sand                 | 293  | 310  |                               |      |      |
| Slate                | 310  | 315  |                               |      |      |
| Lime                 | 315  | 365  | Gas 315' Show of gas          |      |      |
| Slate                | 365  | 385  |                               |      |      |
| Broken Lime          | 385  | 410  |                               |      |      |
| Sand                 | 410  | 447  |                               |      |      |
| Slate                | 447  | 520  |                               |      |      |
| Sand                 | 520  | 716  | Oil & Gas 645' Oil & Gas show |      |      |
| Slate                | 716  | 718  |                               |      |      |
| Sand                 | 718  | 752  |                               |      |      |
| Slate                | 752  | 780  |                               |      |      |
| Lime                 | 780  | 810  |                               |      |      |
| Sand                 | 810  | 897  |                               |      |      |
| Slate & Shells       | 897  | 910  |                               |      |      |
| Lime                 | 910  | 932  |                               |      |      |
| Slate & Shells       | 932  | 959  |                               |      |      |
| Lime                 | 959  | 990  |                               |      |      |
| Sand                 | 990  | 1021 |                               |      |      |
| Red Rock             | 1021 | 1026 |                               |      |      |
| Slate                | 1026 | 1030 |                               |      |      |
| Lime                 | 1030 | 1043 |                               |      |      |
| Slate                | 1043 | 1048 |                               |      |      |
| Lime                 | 1048 | 1080 |                               |      |      |
| Slate & Shells       | 1080 | 1143 |                               |      |      |
| Little Lime          | 1143 | 1168 |                               |      |      |
| Pencil Cave          | 1168 | 1171 |                               |      |      |
| Big Lime             | 1171 | 1388 | Gas 1210-1223 Big Lime Gas    |      |      |
| Red Lime             | 1388 | 1345 | Gas 1304 Big Lime Gas         |      |      |
| <u>Big Injun</u>     | 1345 | 1380 | Gas 1370' Injun Gas show      |      |      |
| Red Lime             | 1380 | 1415 |                               |      |      |
| Slate & Shells       | 1415 | 1767 |                               |      |      |
| Brown Shale          | 1767 | 1776 |                               |      |      |
| <u>Brown Sand</u>    | 1776 | 1785 |                               |      |      |
| Slate & Shells       | 1785 | 3005 |                               |      |      |
| Brown Shale          | 3005 | 3090 |                               |      |      |
| Slate & Shells       | 3090 | 3205 |                               |      |      |
| Brown Shale          | 3205 | 3235 |                               |      |      |
| Slate & Shells       | 3235 | 3435 |                               |      |      |
| Brown Shale          | 3435 | 3630 |                               |      |      |
| White Slate          | 3630 | 4067 |                               |      |      |
| Brown Shale          | 4067 | 4312 |                               |      |      |
| White Slate          | 4312 | 4364 |                               |      |      |
| Black Shale          | 4364 | 4422 |                               |      |      |
| Corniferous Sand     | 4422 | 4519 |                               |      |      |
| <u>Oriskany Sand</u> | 4519 | 4535 | Gas 4522-4524                 |      |      |

*Big Injun*  
*Brown Sand*



12-15-65  
AD

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Rotary   
Spudder   
Cable Tools   
Storage

OIL AND GAS DIVISION  
- DRILL DEEPER -  
WELL RECORD

Quadrangle Charleston

Permit No. KAN-1113-D

Oil or Gas Well \_\_\_\_\_ (KIND)

Company United Fuel Gas Company  
Address P.O. Box 1273 Charleston, W. Va. 25325  
Farm Black Band Coal & Coke Co. Acres. 300  
Location (waters) Kanawha Fork  
Well No. 5400 Elev. 750  
District Loudon County Kanawha  
The surface of tract is owned in fee by \_\_\_\_\_  
Address \_\_\_\_\_  
Mineral rights are owned by Frank A. Hardy, Et al  
Rupert Route Address Lewisburg, W. Va.  
Drilling commenced July 3, 1965  
Drilling completed Aug. 11, 1965  
Date Shot \_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_  
With \_\_\_\_\_

| Casing and Tubing | Used in Drilling | Left in Well | Packers                             |
|-------------------|------------------|--------------|-------------------------------------|
| Size              |                  |              | Kind of Packer                      |
| 16                |                  |              |                                     |
| 13                |                  |              | Size of                             |
| 10                |                  |              |                                     |
| 8 1/4             |                  |              | Depth set                           |
| 6 5/8             |                  |              |                                     |
| 5 3/16            |                  |              |                                     |
| 4 1/2             |                  |              | 5262' Cemented with 110 bags cement |
| 3                 |                  |              | Perf. top                           |
| 2                 |                  |              | Perf. bottom                        |
| Liners Used       |                  |              | Perf. top                           |
|                   |                  |              | Perf. bottom                        |

Open Flow 30 /10ths Water in \_\_\_\_\_ Inch  
4 /10ths Merc. in \_\_\_\_\_ Inch  
Volume 3,391,000 - Newburg Cu. Ft.  
Rock Pressure 2050 lbs. 48 hrs.  
Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
WELL ACIDIZED (DETAILS) \_\_\_\_\_  
WELL FRACTURED (DETAILS) \_\_\_\_\_

Attach copy of cementing record.  
CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. Ft. \_\_\_\_\_ Date \_\_\_\_\_  
Amount of cement used (bags) \_\_\_\_\_  
Name of Service Co. \_\_\_\_\_  
COAL WAS ENCOUNTERED AT \_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES

RESULT AFTER TREATMENT (Initial open Flow or bbls.) \_\_\_\_\_  
ROCK PRESSURE AFTER TREATMENT \_\_\_\_\_ HOURS  
Fresh Water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand \_\_\_\_\_ Depth \_\_\_\_\_

| Formation             | Color | Hard or Soft | Top       | Bottom                      | Oil, Gas or Water | Depth | Remarks   |
|-----------------------|-------|--------------|-----------|-----------------------------|-------------------|-------|---|
| Drill Deeper -        |       |              |           |                             |                   |       |   |
| Lime & Dolomite       |       |              | 4569      | <del>5203</del> 5219 4 1/2" |                   |       |   |
| Newburg               |       |              | 5203 5219 | <del>5224</del> 5240        |                   |       | 6# at 5262' Cemented with 110 bags cement   |
| Dolomite              |       |              | 5224 5240 | <del>5424</del> 5431        |                   |       |   |
| Keefer Sand           |       |              | 5414 5431 | <del>5455</del> 5471        |                   |       | Perforated 4 1/2" csg. 5221' frac notch   |
| Shale                 |       |              | 5455 5471 | 5503                        |                   |       |   |
| Total Depth           |       |              | 5523'     |                             |                   |       |   |
| Plugged back to 5262' |       |              |           |                             |                   |       | Test before fracture - 300 M<br>Fractured Newburg 8-26-65 with 500 gallons mud acid, 600# J-84, 750# J-111, 20 gallons F-52, 596 bbls. sand laden fluid, 23,000# 20-40 mesh sand.<br>Final open flow after fracture 30/10 Merc. 4" 3,391 M<br><br>Shut in 8-25-65 in 4 1/2" casing. |
|                       |       |              |           |                             |                   |       | LOGS RUN:<br>Gamma Ray<br>Density<br>Induction  |

