

*Kanawha Forest Field*

7.5 06 15 topo loc  
 38° 15' 00" 0.03 S  
 81° 40' 00" 1.72 W

Minimum Error of Closure 1' in 200'  
 Source of Elevation Black Band Fuel Co. Well #18,  
 Elevation 801.40 ground

- Fracture
- New Location
- Drill Deeper
- Abandonment

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Signed: A.C. Hillbert

Map No. 122W Squares: N S 81 E W 62

Company PENNZOIL UNITED, INC.  
 Address P. O. Box 1588, Parkersburg, W. Va.  
 Farm Black Band Fuel Co.  
 Tract \_\_\_\_\_ Acres 5500 Lease No. 69966  
 Well (Farm) No. 20 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 922.66  
 Quadrangle Peytona <sup>15</sup> Recess <sup>7.5</sup> NW  
 County Kanawha District Washington  
 Engineer A.C. Hillbert  
 Engineer's Registration No. 2534  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date June 21, 1968 Scale 1" = 800'

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

**WELL LOCATION MAP**

FILE NO. KAN-2275

+ 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.



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

Rotary   
Spudder   
Cable Tools   
Storage   
Oil or Gas Well  (KIND)

Quadrangle PEYTONA  
Permit No. KAN-2275

**WELL RECORD**

Company PENNZOIL UNITED, INC.  
Address P. O. Box 1588, Parkersburg, W. Va.  
Farm Black Band Fuel Co. Acres. 5500  
Location (waters) Spruce Fork  
Well No. 20 Elev. 922.66  
District Washington County Kanawha  
The surface of tract is owned in fee by Dickinson Fuel Co.  
P. O. Box 311  
Address Charleston, W. Va.  
Mineral rights are owned by Dickinson Fuel Co.  
P. O. Box 311  
Address Charleston, W. Va.  
Drilling commenced July 3, 1968  
Drilling completed July 21, 1968  
Date Shot - From - To -  
With -  
Open Flow /10ths Water in Inch  
/10ths Merc. in Inch  
Volume Est. After Frac. 1.5 MMCF Cu. Ft.  
Rock Pressure 1950 lbs. 24 hrs.  
Oil None bbls., 1st 24 hrs.  
WELL ACIDIZED (DETAILS) -

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer Guide
13 - 3/8"	43.23	43.23	Shoe Float Collar
10 - 8-5/8"	1667.89	1667.89	(Halliburton Form- ation Packer)
8-1/2 5-1/2"	5315.38	5315.38	Size of 8-5/8"
6-5/8 2-3.8"	5349.76	5349.76	Depth set 1672.11, 1641.23, 5318.18
5 3/16			
4 1/2			
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

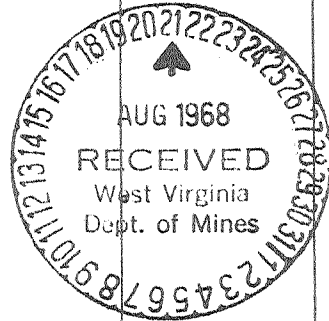
Attach copy of cementing record  
13-3/8" 44.23 7-4-68  
8-5/8" 1672.11 No. Ft. 7-11-68 Date  
CASING CEMENTED 5-1/2" 5318.61 7-18-68  
Amount of cement used (bags) 75 Cu. Ft. - 500 Cu. Ft. Pozmix  
150 cu. ft. Reg. Portland-200 cu. ft. Pozmix  
Name of Service Co. Well Service Inc.

COAL WAS ENCOUNTERED AT 35-37 FEET INCHES  
FEET INCHES FEET INCHES  
FEET INCHES FEET INCHES

WELL FRACTURED (DETAILS) 7-28-68 With 500 Gal. H.F. Acid D S, 1/2 gal. Inhibitor, 400# WAC 10,  
600# WG-6, 10 gal. Morflo, 30 gal. Howco Suds, 28,500# Sand 20/40 Bulk, Fraced with 3 Jet Turbines  
(2500HHP) and 767 Bbls. of water (Total)  
RESULT AFTER TREATMENT (Initial open Flow or bbls.) 1.5 MMCF est. 1,500,000  
ROCK PRESSURE AFTER TREATMENT 1950# HOURS 1500 MCF  
Fresh Water - Feet - Salt Water - Feet -  
Producing Sand - Depth -

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Sandstone			0	35			
Coal			35	37			
Sand			37	47	Water	37	Small amount
Sand Hard			47	132			
Lime & Shale			132	265			
Sand & Shale			265	580			
Sand			580	1378			
Little Lime			1378	1406			
Pencil Cave			1406	1412			
Big Lime			1412	1594			
Shale - 369			1594	1606			
Big injun			1606	1649			
Shale			1649	2045			
Berea			2045	2065			
Shale			2065	4546			
Morcellus Shale			4546	4578			
Onondaga Lime			4578	5343			
Newburg Sand			5343	5366			
Lime			5369				
Total Depth				5378			5-1/2" Casing 5335

*Prod. Newburg  
TD - McKenzie*



5343  
923  
4420