

Operator: United Fuel Gas Company  
 Farm: New River Poca. Consol. Coal Co.  
 Well No.: 9050  
 Location: Tazewell County  
 14,400' S of 37°15'  
 15,250' W of 81°40'

Elevation: 2361.28'

Total Depth: 5145'

Remarks: Elevation and location of well site with reference to: measured sections nos. 246 and 247; coal geology along Indian Creek; and Indian Creek core 1 1/2 mi. NW; indicate that well spudded in near the Greasy Creek coal horizon, and about 75' above the Middle Seaboard horizon. Depths are measured and recorded from K. B., 10 feet above ground level.

<u>Formation</u>	<u>Top</u>	<u>Bottom</u>	<u>Thickness</u>
Pennsylvanian System			
Post Pocahontas Formation "in at surface"		840	840'
		Greasy Creek horizon at surface	
		Middle Seaboard coal 80-83	
		Lower Seaboard horizon at 130'	
		Upper Horsepen coal 320-322	
		Middle Horsepen coal 446-450	
		War Creek horizon at 530'	
		Lower Horsepen at 630'	
		Pocahontas #9 coal 738-740'	
		Pocahontas #8 coal 778-780'	
Pocahontas Formation	840	1430?	590'
		Pocahontas #7 coal 875-880	
		Flat Top Mtn. sand 840-875	
		Pocahontas #5 coal 1028-1030	
		Pocahontas #4 horizon at 1070'	
		Pocahontas #3 coal 1145-1147	
Mississippian System			
Bluestone Formation	1430?	1900	470'
Pride Shale	1610	1900	290'
Princeton Interval	1900	2140	240'
Little Stone Gap Mem.	2140	2230	90'
*Maxon Sand	2985	3035	50'
*Greenbrier Formation	3757?	4436	679'
*Maccrady	4436		

\*Determined from geophysical well logs.

All correlations by Marshall Miller, 1970-74, VDMR.

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           14,400' S of 37°15'  
           15,250' W of 81°40'  
 Elevation: 2361.28'  
 Total Depth: 5145'  
 Drilling Commenced: May 17, 1961  
 Well Completed: June 20, 1961  
 Geologic log by Marshall S. Miller, VDMR, 1970-71.

<u>Depth</u>	<u>Thickness</u>	<u>Description</u>
0- 20	20'	No samples
20- 60	40'	Sandstone, light gray to gray, very fine to fine grained, subround, moderately sorted, with abundant mica flakes, biotite, chlorite, traces of feldspar, siderite, finely dispersed coal fragments, calcareous clay matrix; about 55% quartz, 5% feldspar, 20% matrix, 20% rock and accessory minerals
60- 70	10'	No samples
70- 80	10'	Siltstone, dark gray, argillaceous, micaceous, locally carbonaceous
80- 83	3'	Coal
83-130	47'	Sandstone, light gray to gray, very fine to fine grained, subround, moderately sorted, with occasional large quartz grains, abundant dark argillaceous material, abundant clay matrix, 60% quartz
130-140	10'	No samples
140-160	20'	Shale, dark gray to gray, finely micaceous, locally silty, hard, brittle, poorly fissile, occasional coarse grained muscovite

160-220	60'	Sandstone, light gray to white, fine grained, subround, moderately to well sorted, with scattered micas, and coaly material, white, clay matrix material, about 75% quartz, rare stringers of gray siltstone
220-320	100'	Sandstone, as in 160-220, medium grained, less silt material, about 80% quartz
320-322	2'	Coal
322-350	28'	Sandstone, white, medium grained, moderately quartzose, with finely dispersed coal fragments, white clay silica matrix material, 80 to 85% quartz
350-380	30'	Sandstone, gray, fine grained, subangular to subround, with abundant muscovite, biotite, chlorite, dark coaly material and argillaceous rock fragments, abundant clay and silt matrix material, about 55% quartz
380-390	10'	No samples
390-446	56'	Sandstone, as in 350-380
446-450	4'	Coal
450-460	10'	Sandstone, as in 350-380
460-470	10'	Sandstone, white, very fine to fine grained, subround, well sorted, with scattered coal fragments, mica flakes, and rare chlorite, feldspar and reddish-orange iron minerals, white clay matrix material, 85% quartz, 10% matrix, 5% rock and mineral fragments
470-480	10'	No samples
480-580	100'	Sandstone, as in 460-470
580-600	20'	Siltstone, gray, siliceous, with scattered argillaceous material
600-670	70'	Sandstone, as in 460-470

670-737	67'	Sandstone, light tan, very fine grained and silty, micaceous, slightly feldspathic
737-740	3'	Coal
740-778	38'	Sandstone, light gray to white, fine grained, subangular to subround, moderately well sorted, with scattered muscovite, and carbonaceous material, rare chlorite, biotite and limonite stains; calcareous clay matrix, about 75% quartz
778-780	2'	Coal
780-840	60'	Siltstone, gray, hard, brittle, finely micaceous, locally carbonaceous
840-850	10'	No samples
850-870	20'	Sandstone, white to light gray, fine to medium grained, subround to subangular, with scattered micas and dark argillaceous and carbonaceous material, about 75% quartz
870-875	5'	Sandstone, as in 850-870, with much more carbonaceous material
875-880	5'	Coal
880-900	20'	Sandstone, as in 850-870
900-950	50'	Sandstone, light gray to white, fine to medium grained, subround to subangular, moderately sorted, with abundant coaly and argillaceous rock fragments, lesser amounts of chlorite, muscovite and feldspar, clay-silt matrix material
950-1000	50'	Siltstone, gray, argillaceous
1000-1028	28'	Siltstone, dark gray, hard, brittle, shaly, locally carbonaceous
1028-1030	2'	Coal

1030-1070	40'	Sandstone, light tan to light gray, fine to medium grained, subround to subangular, poorly sorted, with abundant muscovite, chlorite, dark rounded rock fragment and traces of feldspar, abundant clay matrix material
1070-1080	10'	No samples
1080-1100	20'	Shale, dark gray, finely micaceous, silty
1100-1130	30'	Sandstone, light gray, fine to medium grained, subrounded, moderately to poorly sorted, with abundant muscovite, chlorite, dark rock fragments, traces of feldspar, and limonite stains; about 65% quartz
1130-1145	15'	Siltstone, gray, argillaceous
1145-1147	2'	Coal
1147-1160	13'	Siltstone, gray, argillaceous, carbonaceous
1160-1250	90'	Sandstone, light gray, fine to medium grained, subangular, poorly sorted, with abundant muscovite, biotite, chlorite, and carbonaceous material
1250-1320	70'	Siltstone, light gray, argillaceous
1320-1430	110'	No samples
1430-1450	20'	Siltstone, light gray to gray, greenish gray, calcareous
1450-1500	50'	Siltstone, red, green, gray, calcareous
1500-1510	10'	Siltstone, green, siliceous, calcareous
1510-1530	20'	Siltstone, red, green, gray, calcareous
1530-1550	20'	Siltstone, green, siliceous and argillaceous
1550-1580	30'	Siltstone, red and gray, calcareous
1580-1610	30'	Siltstone, green, light gray, siliceous, calcareous with lesser amounts of gray calcareous shale

1610-1660	50'	Siltstone, dark gray, gray, locally shaly, slightly calcareous, shalier downward
1660-1730	70'	Shale, dark gray to black, slightly silty, scattered muscovite, locally calcareous
1730-1740	10'	No sample
1740-1900	160'	Shale, as in 1660-1730, less siltstone, black, platy, fairly fissile, carbonaceous in basal 30'
1900-1925	25'	Sandstone, white, fine grained, rounded, well sorted, quartzose, over 95% quartz, with scattered dark rock fragments
1925-1940	15'	Shale, gray, hard, brittle, silty, finely micaceous
1940-1950	10'	Sandstone, white, fine to medium grained, sub-rounded, quartzose, with scattered dark rounded rock fragments
1950-1960	10'	Sandstone, light tan, very fine grained to fine grained, subround to subangular, very silty
1960-2100	40'	No samples
2100-2110	10'	Shale, red, green, gray, calcareous
2110-2120	10'	No samples
2120-2140	20'	Shale, red, green, gray, non-calcareous with minor dark gray calcareous shale
2140-2210	70'	Shale, gray to tan, silty, very calcareous
2210-2230	20'	Shale, gray, calcareous, with lesser amounts of brownish gray impure fossiliferous limestone
2230-2235	5'	Shale, red, green, gray, calcareous
2235		Shale, red to brick red, calcareous