

PRATER

Operator: United Fuel Gas Company  
 Farm: The Pittston Co.  
 Well No.: 9587  
 Elevation: 1475.19' Ground  
 Location: Buchanan County  
 1800' W of 82°12'30"  
 200' N of 37°12'30"

Total Depth: ~~4574'~~ 5860'

Remarks: Elevation and location of well with reference to: measured section No. 61; coal geology along Russell Prater Creek; indicate that well spudded in below the Hagy, about 20' above the Splash Dam Coal, about 300' above the Kennedy coal, and 500' above the Raven coal.

Note: Final and exact formational boundaries are determined from the Schlumberger Well Logs. Geologic log 1600-2500. Depths below are measured from 10 feet above ground level.

<u>Formation</u>	<u>Top</u>	<u>Bottom</u>	<u>Thickness</u>
<b>Pennsylvanian System</b>			
Post Lee Formation "in at surface"		917	917'
*Noted by driller		*Splash Dam coal 30-31*	
		*Upper Banner coal 67-68*	
		*Lower Banner coal 136-138*	
		Kennedy coal horizon at 350'	
		McClure sand interval 355-455	100'
		Raven coal horizon at 550'	
		Jawbone coal horizon at 650'	
		Tiller coal horizon at 725'	
Lee Formation	917	1622	705'
		quartzose sand 917-997	80'
		quartzose sand 1016-1068	52'
		War Creek coal horizon at 1320'	
		quartzose sand 1622-1670	
Pocahontas Formation	1622	1910	288'
		Pocahontas #3 coal 1690-1700	10'?
		Pocahontas coals 1866-1872	
		1878-1880	
		1850-1852	

Mississippian System

W-3082

Bluestone Formation 1910

2355

445'

Pride Shale 2175

2355

180'

Princeton Interval 2355

2420

65'?

Little Stone Gap Mem. 2420

2455

35'

Maxon Sands 2682

2795

(113') SOAP

2890

2932

42'

2982

2995

13'

Greenbrier Formation 3215

<sup>611</sup>  
3723

552'

1475

Maccrady 3723

2248

BU-92

Operator: United Fuel Gas Co.

Farm: The Pittston Co.

21480

Well No.: 9587

Location: Buchanan County

1800' W of 82°12'30" (Prater Quad)

200' N of 37°12'30"

Total Depth: ~~4574~~ 5860'

Geologic log supplement by Marshall S. Miller, VDMR, 1971-72.

<u>Depth</u>	<u>Thickness</u>	<u>Description</u>
1600-1630	30'	Siltstone, gray to light tan, hard, brittle, argillaceous, finely micaceous, locally carbonaceous
1630-1660	30'	Sandstone, white, quartzose, medium grained, subround, well sorted, with scattered dark rounded rock fragments; 90 to 95% quartz
1660-1680	20'	Sandstone, white, quartzose, fine grained to granular, with scattered conglomeratic, sub-angular to subround, poorly sorted, with scattered dark, rounded, argillaceous rock fragments; 95% quartz
1680-1690	10'	Siltstone, gray to dark gray, shaly, carbonaceous
1690-1700	10'	Coal, pure, high vitreous luster, blocky and conchoidal fracture, driller notes a coal from 1698-1699
1700-1720	20'	Sandstone, light gray to gray, medium to very coarse grained, subangular, poorly sorted, with scattered muscovite, dark, argillaceous and carbonaceous rock fragments, abundant ? clay silt matrix material, about 65-75% quartz, ? 15% matrix, 10% rock and accessory minerals
1720-1800	80'	Siltstone, tan to brownish gray, with abundant dark, shaly material, grades downward to a gray, silty, shale
1800-1815	15'	Sandstone, light gray to gray, very fine to medium grained, subangular, poorly sorted, with abundant white clay-silt matrix material, dark argillaceous rock fragments, and rare mica, 65% quartz

Poc #3

1815-1820	5'	Shale, gray, light gray, silty, slightly calcareous, hard, pebbly
1820-1830	10'	Sandstone, light gray, very fine grained to fine grained, subangular to subround, moderately sorted, with rare muscovite, abundant clay matrix material, and dark rock fragments, 65 to 70% quartz
1830-1840	10'	Siltstone, tan, brownish gray, argillaceous with considerable dark, shaly material, grades to a fine grained sandstone
1840-1850	10'	Sandstone, light gray, very fine grained, subangular to subround, moderately sorted, interbedded with a gray shale
1850-1852	2'	Coal, pure, high luster
1852-1866	14'	Siltstone, gray, argillaceous
1866-1872	6'	Coal, pure, with high vitreous luster, driller notes coal in this interval
1872-1878	6'	Sandstone, light gray to gray, very fine to medium grained, subangular, poorly sorted with abundant dark, shaly material
1878-1880	2'	Coal, hard, shaly, impure
1880-1900	20'	Siltstone, gray to dark gray, shaly and carbonaceous
1900-1910	10'	No samples
1910-1930	20'	Shale, gray, greenish gray, dark gray, calcareous, silty
1930-1940	10'	Shale, red, green, greenish gray, gray, generally calcareous, with rare spherulitic siderite nodules
1940-2000	60'	Claystone, white, light tan, gray to red, calcareous and very silty
2000-2010	10'	Siltstone, light tan to gray to greenish gray, generally calcareous

2010-2200	190'	Siltstone, red, but mostly light gray, gray, calcareous, with abundant white clay material, and fine grained, siliceous material
2200-2300	100'	Siltstone, gray, argillaceous, locally shaly, locally calcareous
2300-2330	30'	No samples
2330-2355	25'	Siltstone, as in 2200-2300
2355-2440	85'	Siltstone, gray to light gray, with considerable fine siliceous-clay material, and interbeds of gray, calcareous shale
2440-2455	15'	Limestone, brownish gray, argillaceous with lesser amounts gray, calcareous shale
2455-2500	45'	Siltstone, light gray to tan, with abundant white clay material