

Yantley and Freeman Coal Co., No. 78 Well

Logan District, Logan County, W. Va.

By South Penn Natural Gas Company, Parkersburg, W. Va.

Located 3.15 mi. W. of 81°55' and 2.61 mi. S. of 37°55' WC - Logan Quadrangle.

Elevation 835.38'.

Permit (Log-89)

Completed 1943; dry hole; gas shows in Big Linc and Berea.

Section based on samples from 1500 to 1795' and 2303 to 2353' examined by J.H.C. Martens.

Top Bottom Thickness

Greenbrier Limestone, 226 feet

1500	1540	40	Limestone, light-brown; also a little shale of various colors; driller's record gives top of Big Linc at 1565', but it is apparently above 1500'.
1540	1610	70	Limestone, light-brown
1610	1630	20	Limestone, very light-brown
1630	1645	15	Limestone, light-brown, slightly sandy
1645	1656	11	Limestone, very light brown, calcitic
1656	1665	9	Limestone, light-brown
1665	1675	10	No sample
1675	1680	5	Limestone, light-brown
1680	1703	23	Limestone, light-brown, partly calcitic; also a few red limestone fragments
1703	1726	23	Limestone, brown, highly dolomitic, with very little grey chert; some pores visible in sample from 1703-1718 (gas, 1703-1718', 133 M)

Maccrady Formation, 37 feet

1726	1733	7	Siltstone, gray
1733	1741	8	Siltstone, red
1741	1753	12	Shale and siltstone, gray and red
1753	1763	10	Shale, red, very silty

Poccano Formation, 565 feet

1763	1795	32	Siltstone, gray
1795	2303	508	No samples

Top	Bottom	Thickness	
2308	2321	13	Shale, black (Sambury Shale)
2321	2328	7	Sandstone, nearly white, fine, pyritic, (Berea Sand- stone; gas, 2325-2328')
			<u>Devonian Shales, 50+ feet</u>
2328	2358	30	Shale, gray
	2358		Total depth