

Buchanan County
 Clinchfield Coal Co.
 Big Sandy Fuel Corp. Well No. 213
 VDMR Well W-331
 Index No. 7
 Elevation: 1620'

Remarks: Elevation and location of well indicate well located 65' below
 Dorchester Coal, 115' above the Hagy coal, 215' above the Splash
 Dam Coal and 465' above the Kennedy Coal. Referred to: geology
 on Hunts Creek and measured sections 82, 83, and 97.
 Correlations by Marshall Miller, 1970-74, VDMR.

<u>Formation</u>	<u>Top</u>	<u>Bottom</u>	<u>Thickness</u>
Pennsylvanian System			
Post Lee Formation	0	664	664'
		unidentified coal 60-61	
		Hagy coal horizon at 115' (coal in cuttings 112-121)	
		Splash Dam coal horizon at 215'	
		(coal in cuttings 230-231)	
		Kennedy coal horizon at 500'	
Lee Formation	664	1818	1154'
		War Creek coal in interval 1495-1515	
Upper Member (664-729)	65'		
		quartzose sand 664- 729	65'
		conglomeratic 713- 729	16'
Middle Member (1049-1420)	371'		
		quartzose sand 1049-1190	149'
		conglomeratic 1063-1073	10'
		conglomeratic 1095-1105	10'
		conglomeratic 1130-1138	8'
		conglomeratic 1145-1158	13'
		conglomeratic 1174-1180	6'
		quartzose sand 1305-1330	25'
		quartzose sand 1350-1445	95'
		conglomeratic 1350-1420	70'

47'

Lower Member
(1712-1818) 106'

quartzose sand 1712-1759	47'
conglomeratic 1719-1759	40'
quartzose sand 1769-1818	49'
conglomeratic 1769-1818	49'
total quartzose sand	430'
total conglomerate	206'

Mississippian System

Bluestone Formation	1818	2251	433'
Pride Shale	2095	2251	156'
Princeton Sandstone	2251	2418	167'
Hinton Formation			
Little Stone Gap	2418	2432	14'
Greenbrier Formation	3017	3504	487'
Mccrady	3504		

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Geologic summary by Marshall S. Miller to name and identify coal beds and Lee quartzose sands. All other descriptions are referred to R. J. Voigtsberger's geologic log. *where? (JKP 84)*

<u>Depth</u>	<u>Thickness</u>	<u>Description</u>
60- 61	1'	Coal, good show, 1/2" blocks of silty coal with good blocky fracture, low luster. The Norton Coal? Depth determined from drillers log.
230- 231	1'	Coal, dull, silty, bony, reduced to a soft powder in cuttings; [the Hagy coal]
664- 729	65'	Sandstone, white, quartzose, medium to coarse grained, subangular to subround, occasionally interstitially silty, composed of almost 100% quartz; occasional coaly material is only accessory. Conglomeratic (713-729)
1049-1138	89'	Sandstone, white, quartzose, fine to coarse grained to granule, subround to subangular, poorly sorted, considerable shaly "contamination" present in cuttings. Conglomeratic (1063-1073) (1095-1105) (1130-1138) X-ray of intervals (1085-1089) and (1105-1120) indicate a quartzose sand, no traces of feldspar, and minor traces of illite, siderite and muscovite
1138-1190	52'	Sandstone, white, quartzose, medium to coarse grained, subround to subangular, occasionally coarse grained, moderately to poorly sorted, occasionally interstitially silty, conglomeratic (1145-1158) (1174-1180)

The interval below is a light gray, very fine grained "dirty" micaceous sandstone. The change is very striking.

1305-1330	25'	Sandstone, white, quartzose, fine to coarse grained, subround to subangular but mostly subrounded, moderately to poorly sorted, interstitially silty
1350-1420	70'	Sandstone, white, quartzose, medium to very coarse grained, granule, subround to subangular, poorly sorted, appears loose, with no visible matrix material, conglomeratic throughout
1420-1445	25'	Sandstone, white, quartzose, fine to coarse grained, subround, moderately sorted, interstitially silty
1712-1719	7'	Sandstone, white, quartzose, medium grained, subround, well sorted
1719-1729	10'	Sandstone, white, quartzose, fine to coarse grained, subround to subangular, poorly sorted, conglomeratic
1729-1759	30'	Sandstone, white, quartzose, coarse grained, granule, conglomeratic, round to angular, poorly sorted, pure quartz with no matrix material, some bluish and white chert occasionally present
1759-1769	10'	Siltstone, dark gray, micaceous, and sandstone, fine grained, micaceous, with silt and dark argillaceous material
1769-1818	49'	Sandstone, white, quartzose, medium to coarse grained, granule, and conglomeratic (considerable contamination from above), subangular, poorly sorted
1818-		Red, pastel green, and gray, slightly calcareous shales