VDMR Well No.: W-1239

Operator: Consolidation Coal Company

Farm: Pocahontas Fuel Co. (Faraday Tract)

Well No.: 6 Index Nol: 6

Location: Tazewell County

 $10,500^{\circ}$ N of $37^{\circ}10^{\circ}$ THESE DO NOT CHECK WITH COMPLETION REPORT 8,450° W of $81^{\circ}40^{\circ}$

Elevation: 2395.5 Total Depth: 55381

Geologic log and summary by Marshall S. Miller. The Pennsylvanian section is logged in as much detail as possible, considerable contamination

is present because of air rotary samples.

Depth	Thickness	Description
0-200	2001	No samples
200-201	1 *	Coal, pure to impure, silty in part
201-260	591	Siltstone, light brown to light gray, finely micaceous, locally carbonaceous
260-288	28'	Sandstone, light gray, fine to medium grained, subround to subangular, moderately to poorly sorted, with scattered muscovite, chlorite, traces of feldspar, and considerable clay matrix material, 75 to 80% quartz
288-290	2'	Coal, shaly with fossil plant fragments
290-318	28'	Siltstone, light brown, siliceous, locally carbonaceous
318-320	21	Coal
320-330	10'	Siltstone, gray, carbonaceous
330-418	881	Sandstone, light gray, fine to medium grained, subround to subangular, poorly sorted, with abundant carbonaceous material, large muscovite flakes, scattered chlorite, trace of feldspar, limonite stains, abundant clay and silt matrix material, about 55 to 60% quartz

418-420	21	Coal
420-428	81	Siltstone, dark gray, carbonaceous
428-430	21	Coal
430-480	501	Siltstone, as above, interbedded with a gray, micaceous, silty sandstone
480-482	2'	Coal
482-500	18'	Siltstone, light gray, coarse grained, siliceous
500-510	10'	Coal, pure to impure, high luster
510-550	40'	Shale, gray, silty, carbonaceous, poorly fissile
550-560	10'	Siltstone, gray, locally shaly
560-570	10'	Coal
570-600	30'	Siltstone, gray, shaly, locally sandy, occsionally carbonaceous
600-619	19'	Sandstone, light gray, very fine to medium grained, subround, poorly sorted, with abundant muscovite, chlorite, and coal fragments, dark argillaceous rock fragments and white clay matrix material, about 60% quartz
619-620	. 1'	Coal
620-680	60'	Sandstone, as in 600-619
680-688	8'	Shale, gray, silty, with lesser amounts of gray, silty sandstone
688-700	21	Coal
700-720	20 [†]	Shale, gray, hard, brittle, with lesser amounts of gray, silty, sandstone and reddish-brown ironstone
720-735	15'	Siltstone, gray, locally shaly and sandy with small amounts of reddish brown ironstone
735-737	2'	Coal

737-780	43'	Siltstone, as in 720-735
780-820	40'	Shale, gray, hard, brittle, locally carbonaceous
820-822	2'	Coal
822-920	981	Sandstone, light gray to white, fine to medium grained, subround to subangular, moderately sorted, with scattered amounts of muscovite, biotite, chlorite, red hematite, some siderite, traces of feldspar, and coaly fragments, about 75% quartz, smaller amounts of gray shale present locally
920-960	401	Sandstone, as in 822-920, no shale present
960-1018	58'	Siltstone, gray to dark gray, locally shaly and sandy
1018-1020	21	Coal
1020-1070	501	Siltstone, dark gray, silty, carbonaceous, locally sandy
1070-1108	38'	Sandstone, light gray to gray, medium to coarse grained, subangular, poorly sorted, with muscovite, biotite, chlorite, trace of feldspar, siderite, and dark rock fragments, clay-silt matrix material, about 75% quartz
1108-1110	21	Coal
1110-1118	8'	Siltstone, gray, carbonaceous
1118-1120	2'	Coal
1120-1150	30'	Siltstone, gray, light gray, shaly, locally sandy
1150-1198	48:	Sandstone, light gray to gray, very fine to medium grained, subround to subangular, poorly sorted, with abundant muscovite, dark coaly and argillaceous rock fragments, reddish iron minerals, white clay matrix material
1198-1200	2'	Coal
1200-1210	10'	Sandstone, as in 1150-1198 and gray, siltstone

1210-1268	581	Sandstone, as in 1150-1198, with minor amounts of gray, silty, shale and reddish brown ironstone
1268-1270	21	Coal
1270-1300	30'	Siltstone, gray, shaly, locally sandy
1300-1310	10'	Shale, dark gray, carbonaceous
1310-1320	101	Coal, and black carbonaceous shale
1320-1330	10'	No samples
1330-1360	30'	Shale, dark gray, finely micaceous, locally carbonaceous, with small, spherulitic siderite nodules
1360-1400	401	No samples
1400-1470	70'	Sandstone, light gray, very fine to fine grained, subrounded, with abundant dark rounded rock fragments and calcareous clay matrix material
1470-1490	20'	Shale, gray, calcareous, silty
1490-1500	101	Sandstone, light gray to white, very fine grained to coarse grained, subangular to subround, poorly sorted, calcareous, interstitially silty
1500-1510	10'	No samples
1510-1540	301	Sandstone, as in 1490-1500
1540-1740	200'	Shale, red, green, and gray, generally calcareous, with lesser amounts of gray siltstone, and greenish gray, fine grained sandstone
1740-1790	50'	Shale, red, calcareous, with lesser amounts of green siltstone, and brownish gray limestone
1790-19 6 0	170'	Siltstone, gray to grayish brown, generally argillaceous, locally siliceous and carbonaceous
1960-2090	130'	Shale, dark gray to black, silty, locally carbonaceous, finely micaceous

2090-2160	70'	Sandstone, white, very fine to medium grained, moderately quartzose, subround to subangular, moderately sorted, with scattered muscovite, chlorite, and dark rock fragments, conglomeratic in basal 10'
2160-2220	60'	Sandstone, white, fine grained, quartzose, sub- round, well sorted, with rare micas and white clay matrix
2220-2240	201	Siltstone, gray, shaly
2240-2290	50'	Sandstone, white, fine grained, subround, well sorted, moderately quartzose to quartzose
2290-2400	1101	Siltstone, gray to light gray, argillaceous, locally siliceous
2400-2460	601	Shale, gray, calcareous, and limestone, grayish brown, argillaceous, with fossil shell fragments and crinoid stems
2460-2920	460'	Siltstone, red, calcareous, with lesser amounts of gray calcareous shale, and fine grained, micaceous, sandstone
2920-2960	401	Sandstone, light brown to reddish brown, fine grained, silty, hematitic in part
2960-2990	30'	Shale, dark gray, slightly calcareous, locally pyritic
2990-3040	50'	Shale, red, silty, calcareous
3040-3070	30'	Sandstone, light brown, fine grained, micaceous, silty, calcareous clay matrix
3070-3100	301	Shale, red, silty, calcareous, with lesser amounts of brownish gray, argillaceous limestone
3100-3240	140'	Shale, gray to bluish gray, calcareous, locally silty, with minor amounts of light gray, calcareous sandstone