

M. M. Robertson et al. No. 1 Well (GW-346)

Elk District, Kanawha County, W. Va.

By Columbian Carbon Company, Charleston, W. Va.

0.81 mi. N. of 38°25' and 1.4 mi. N. of 81°35' -NE- Charleston Quadrangle.

Elevation, 902.2' L.

Permit Kan-205.

Completed in 1936.

13" casing, 23'4"; 10", 426' (pulled); 8½", 1776' (pulled), 6-5/8", 4920' (pulled).

Coal was encountered at 457-460'.

Record on pp. 219-220 of Deep-Well Records Report, 1936. Description of samples below top of Huntersville Chert on pp. 191-193 of Vol. XI.

Samples start at a depth of 432 feet. The top of the well is in the lower part of the Conemaugh but the record is not detailed enough to locate either the base of the Conemaugh or the base of the Allegheny Formation. The top of the Mauch Chunk as placed at 1476 feet on the basis of a change in texture of the sandstone is very uncertainly located. It may be at 1515 feet, making the thickness of the Mauch Chunk 43 instead of 82 feet.

Top	Bottom	Thickness	
0	20	20	Clay, red
20	25	5	Clay, yellow
25	60	35	Red rock
60	72	12	Sand
72	246	174	Slate
246	252	6	Sand
252	257	5	Slate
257	267	10	Sand
267	290	23	Slate
290	308	18	Sand
308	312	4	Slate
312	330	18	Sand
330	378	48	Slate
378	397	19	Sand
397	412	15	Slate
412	457	45	Sandstone, nearly white, medium-grained; moderately calcareous,

Top	Bottom	Thickness	
457	460	3	Coal
460	466	6	Shale, black, silty
466	475	9	Shale, brownish-gray, silty
475	785	10	Shale, gray, soft; some siderite concretions
485	500	15	Siltstone, gray, shaly, micaceous
500	552	52	Sandstone, very light-gray, medium-grained; contains mica, chlorite, siderite and carbonaceous matter
552	564	12	Shale, gray
564	573	9	Sandstone, light-gray, fine, 70%; gray siltstone, 30%; very little coal
573	580	7	Shale, gray, soft
580	596	16	Siltstone, dark-gray, shaly micaceous
596	644	48	Sandstone, light-gray, fine, slightly calcareous; contains mica, chlorite and siderite
644	654	10	Siltstone, gray, shaly micaceous
654	710	56	Sandstone, nearly white, fine- to medium-grained; contains mica, chlorite, kaolin and siderite
710	760	50	Shale, dark-gray
760	787	27	Siltstone, gray, shaly, micaceous
787	794	7	Shale and siltstone, gray, 80%; coal 20%
794	800	6	Shale and siltstone, gray
800	825	25	Sandstone, nearly white, medium-grained
825	835	10	Shale, dark-gray, silty
835	875	40	Sandstone, nearly white, medium-grained; contains small amounts of mica, chlorite, kaolin and siderite
875	885	10	Siltstone, gray, shaly
885	903	18	Sandstone, white, fine
903	1044	141	Sandstone, white, medium-grained, nearly all quartz; mostly broken up into individual grains; many grains have crystal faces
1044	1157	113	Sandstone, white, mostly coarse-, some medium-grained; nearly all quartz with crystal faces on many grains
1157	1250	93	Sandstone, white, same as above but mostly medium-grained with only a little coarse

Top	Bottom	Thickness	
1250	1270	20	Shale and siltstone, dark-gray; thin coal near top of interval
1270	1298	28	Sandstone, light-gray, fine; also some gray shale and siltstone and a little coal
1298	1337	39	Sandstone, white, fine, nearly all quartz; mostly broken up into individual grains
1337	1430	93	Sandstone, white, medium- to coarse-grained, nearly all quartz; crystal faces on many grains
1430	1476	46	Sandstone, nearly white, very coarse; a little coal, 1430-1444'
<u>Mauch Chunk Group, 82 feet</u>			
1476	1515	39	Sandstone, white, medium-grained, nearly all quartz; crystal faces on many grains; all broken up small
1515	1540	25	Limestone, dark-brown, fossiliferous ("Little Line")
1540	1547	7	Shale, gray and green, soft
1547	1552	5	Limestone, brown
1552	1558	6	Shale, gray and green, soft ("Pencil Cave", the top and bottom of this shale and the similar shale from 1540 to 1547' are from the drillers' record)
<u>Greenbrier Limestone, 142 feet</u>			
1558	1602	44	Limestone, light-brown to very light brown
1602	1635	33	Limestone, nearly white to light-brown, oolitic
1635	1672	37	Limestone, very lightbrown, sandy, oolitic
1672	1700	28	Limestone, nearly white, dolomitic
<u>Pocono Formation, 467 feet</u>			
1700	1757	57	Sandstone, light greenish gray, fine; contains some coarse grains near top; drill cuttings broken very small
1757	1785	28	Siltstone, gray, shaly
1785	1815	30	Sandstone, light-gray, very fine
1815	1819	4	Shale, dark-gray, very silty
1819	1844	25	Sandstone, light-gray, very fine, 80 to 60%; darker gray shale and siltstone, 20 to 40%
1844	1859	14	Shale and siltstone, gray
1859	1886	27	Sandstone, light-gray, very fine
1886	1982	96	Shale, dark-gray; very silty toward bottom
1982	2065	83	Siltstone and shale, gray

Top Bottom Thickness

2065	2075	10	Shale, gray
2075	2150	75	Shale and siltstone, gray
2150	2166	16	Shale, very dark gray (Sunbury Shale)
2166	2167	1	Sandstone, nearly white, fine, pyritic (thickness estimated from relative amount in sample)

Devonian Shales, etc., 2735 feet

2167	2236	69	Siltstone, gray to grayish-green, shaly; coarser toward bottom and includes some very fine sandstone
2236	4906	2670	Samples from this interval not examined
	4906		Top of Huntersville Chert
	6074		Total depth