

C. W. Harris No. 8503 Well

Sherman District, Calhoun County, W. Va.

By Hope Natural Gas Company, Clarksburg, W. Va.

Located 3.5 mi. W. of 81°00' and 0.23 mi. S. of 38°55' -EC- Arnoldsburg Quadrangle;

2 mi. S. E. of Grantsville.

Elevation, 981' L.

Permit Cal-549.

Drilling commenced Oct. 21, 1940; completed Dec. 10, 1940.

Shot Dec. 11, 1940 - depth, 2048-2077'.

Volume, 63,399 cu. ft.

Salt water 1110 and 1870'.

No coal recorded.

10" casing 290'; 8 1/4", 1064'; 6-5/8", 1967'.

Section based on samples from 0 to 2136', examined by C. Apsouri. According to geologic map well starts about 60 feet above base of Dunkard, near 1050 foot contour on Washington Coal.

Top	Bottom	Thickness	<u>Penetration of Pennsylvanian, 1866+ feet</u>
0	10	10	Shale and sandstone, yellow
10	25	15	Siltstone, green
25	47	22	Shale, red
47	62	15	Siltstone, green, sandy
62	82	20	Sandstone, green, very fine, 50%; gray shale and siltstone, 50%
82	87	5	Sandstone, yellowish-green, very fine
87	119	32	Shale, red, soft
119	150	31	Shale, red, soft, 60%; green siltstone, 40%
150	178	28	Siltstone, very light gray, sandy toward bottom
178	193	15	Siltstone, green
193	220	27	Shale, red
220	240	20	Sandstone, green, very fine, silty, 80%; green shale, 20%
240	245	5	Sandstone, white, very fine
245	280	35	Sandstone, white, coarse
280	314	3 3/4	Siltstone, green
314	320	6	Sandstone, green, very fine
320	345	25	Sandstone, white, medium- to coarse-grained

Top	Bottom	Thickness	
345	381	36	Siltstone, green
381	388	7	Sandstone, white to greenish, medium-grained; contains siderite spherulites
388	416	28	Sandstone, white, coarse
416	443	27	Siltstone, green, 60%; red shale, 40%
443	450	7	Sandstone, white, medium-grained
450	457	7	Shale, red and green
457	479	22	Shale, red and green
479	506	27	Siltstone, green
506	518	12	Sandstone, green, very fine
518	524	6	Siltstone, green
524	548	24	Sandstone, white, fine
548	555	7	Shale, red
555	578	23	Siltstone, green
578	612	34	Shale, red, soft
612	624	12	Sandstone, light-green, very fine, silty
624	690	66	Shale, red, soft; up to 40% of green siltstone in some samples
690	700	10	Sandstone, white, medium-grained
700	710	10	Shale, red, soft
710	715	5	Sandstone, white, medium-grained
715	720	5	Sandstone, white, 50%; red shale, 50%
720	740	20	Siltstone, green
740	745	5	Shale, green
745	759	14	Sandstone, white to green, very fine, silty, with siderite spherulites
759	772	13	Shale, white, soft
772	785	13	Siltstone, grayish-green, sandy
785	797	12	Shale, green
797	803	6	Shale, green, 50%; red shale, 50%; a few fragments of coal
803	824	21	Sandstone, white, very fine, with siderite spherulites; also <i>some gray limestone</i>
824	833	9	Shale, very light gray, soft, with siderite spherulites
833	845	12	Sandstone, white, very fine
845	851	6	Siltstone, green, sandy
851	857	6	Shale, green, with some yellow and red

Top	Bottom	Thickness	
857	864	7	Shale, nearly white
864	889	25	Siltstone, green
889	907	18	Shale, red, 80%; green clay or shale, 30% clay white, of flinty appearance, with conchoidal fracture; some of green clay also is flinty and translucent
907	913	6	Sandstone, green, very fine, 80%; shale, red, 20%
913	919	6	No sample
919	925	6	Shale, black, pyritic
925	931	6	Sandstone, greenish, fine
931	949	18	Sandstone, greenish, fine, 60 to 80 %; siltstone, gray, 40 to 4%
943	949	6	60% ; fossiliferous Shale, black, silty
949	955	6	Siltstone, dark-brown to dark-gray, fossiliferous
955	961	6	Sandstone, white, fine- to medium-grained, 50%; greenish shale and siltstone, 50%
961	992	31	Shale, mostly green
992	998	6	Shale, brown, calcareous; ^{50 of} white very fine sandstone, 20%; green shale, 30%
998	1010	12	Sandstone, white, fine
1010	1028	18	Siltstone and shale, gray to greenish
1028	1048	20	Sandstone, green, very fine, 60%; green shale, 40%
1048	1067	19	Shale, greenish-gray
1067	1074	7	Shale, very light brown to brownish-gray, partly calcareous
1074	1081	7	Shale, greenish
1081	1135	54	Sandstone, white, medium- to coarse-grained
1135	1142	7	Siltstone, dark-gray, 70%; gray shale, 30%
1142	1160	18	Siltstone, dark-gray; a few fragments of coal
1160	1320	160	Sandstone, white, medium- to coarse-grained
1320	1328	8	Siltstone, dark-gray, with trace of coal
1328	1336	8	Sandstone, white, very fine, 85%; black shale and coal, 15%
1336	1357	21	Sandstone, white, fine
1357	1370	13	Sandstone, white, coarse
1370	1402	32	Siltstone, gray
1402	1408	6	Sandstone, white, medium-grained

Top	Bottom	Thickness	
1408	1415	7	Sandstone, white, medium-grained, 60%; shale, black and brown with some coal, 40%
1415	1422	7	Siltstone, gray, carbonaceous, with siderite spherulites
1422	1461	39	Shale, gray, with varying amounts of white, very fine, sandstone
14 61	1493	32	Siltstone, gray
1493	1522	29	Sandstone, white, fine
1522	1534	12	Sandstone, white, very fine, 60%; black shale, 40%
1534	1559	25	Sandstone, nearly white, very fine, micaceous
1559	1584	25	Sandstone, nearly white, very fine, micaceous
1584	1603	19	Siltstone, gray
1603	1622	19	Sandstone, white very fine; and gray siltstone, both with siderite spherulites
1622	1630	8	Sandstone, white, coarse, 50%; gray, shaly siltstone, 50%
1630	1644	14	Sandstone, white, very fine, 50%; brown shale, 50%
1644	1715	71	Siltstone, dark-gray
1715	1783	68	Sandstone, nearly white, very fine, with considerable interbedded gray siltstone
1783	1819	36	Shale, gray, silty
1819	1850	31	Sandstone, white, fine; some coarse grains 1842-1850
1850	1855	5	Sandstone, white, fine- to medium-grained
1855	1866	11	Sandstone, white, coarse
<u>Maugh Chunk Group, 44 feet</u>			
1866	1875	9	Sandstone, white, fine, pyritic, 96%; green shale, 4%
1875	1880	5	Sandstone, white, fine, 75%; gray calcareous shale, 25%
1880	1900	20	Limestone, brown, fine-textured, dolomitic ("Little Lime")
1900	1905	5	Sandstone, white, fine, calcareous
1905	1910	5	Sandstone, light-green, fine, 70%; soft green shale, 30%
<u>Greenbrier Limestone, 188 feet</u>			
1910	1920	10	Limestone, brownish, dolomitic, 96%; green shale, 5%
1920	1960	40	Limestone, very light brown, sandy
1960	1972	12	Limestone, brown, sandy
1972	1979	7	Sandstone, white, coarse, highly calcareous
1979	1985	6	Limestone, nearly white, dolomitic; sandy, 1985-1995'
1985	2012	27	Limestone, nearly white, sandy

Top	Bottom	Thickness	
2012	2025	13	Sandstone, white, medium-grained, calcareous
2025	2045	20	No samples
2045	2098	53	Limestone, white, sandy, dolomitic

Pocono Formation, 40+ feet

2098	2136	38	Shale, gray
	2138		Total depth