

Dora E. Hopkins No. 8508 Well

Washington District, Boone County, W. Va.

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

Located 1.0 mi. S. of 38°00' and 2.2 mi. W. of 81°45' -NE- Logan Quadrangle.

Elevation, 1339' L.

Permit, Boo-461.

Drilling commenced July 13, 1940; completed, Nov. 1, 1940.

Volume 55,200 cu. ft.

Fresh water at 110, 255, 410, and 560'.

10" casing, 26'; 8 $\frac{1}{4}$ ", 1360'; 6-5/8", 2276'.

Section based on samples from surface to 2951', examined by J. H. C. Martens.

Top Bottom Thickness

<u>Pottsville Formation, 1378+ feet</u>			
Top	Bottom	Thickness	
0	13	13	Sandstone, brown, coarse
13	69	56	Sandstone, white to very light gray, medium-grained; contains a little mica
69	79	10	Siltstone, gray, 90%; coal, 10%
79	90	11	Coal, 50%; sandstone, white, medium-grained, 50%
90	210	120	Sandstone, white to light-gray, medium-grained
210	220	10	Sandstone, light-gray, fine, micaceous; a little coal
220	250	30	Shale, gray to dark-gray
250	272	22	Sandstone, nearly white, medium-grained
272	290	18	Shale and siltstone, dark-gray
290	300	10	Sandstone, light-gray, medium-grained, micaceous
300	310	10	Shale, gray, 90%; coal, 10%
310	320	10	Siltstone, gray
320	344	24	Sandstone, light-gray, fine, micaceous
344	480	136	Sandstone, very light gray, medium-grained
480	526	46	Siltstone, gray, shaly
526	538	12	Coal, 60%; gray, very fine sandstone, 40%
538	550	12	Shale, black, silty
550	552	12	Sandstone, light-gray, fine, micaceous
552	572	10	Sandstone, white, medium-grained

Top	Bottom	Thickness	
572	581	9	Coal, 70%; sandstone, white, medium-grained, 30%
581	605	24	Sandstone, gray, very fine shaly, micaceous
605	625	20	Shale, black, silty
625	662	37	Siltstone, gray, shaly, micaceous
662	772	110	Sandstone, white to light-gray, medium-grained
772	820	48	Sandstone, light-gray, fine
820	895	75	Sandstone, nearly white, medium- to coarse-grained
895	912	17	Shale, black, very silty
912	933	21	Sandstone, gray, very fine, 80 to 90%; coal, 20% to 10%
933	960	27	Shale, black, silty, micaceous
960	976	16	Shale, dark-gray
976	986	10	Siltstone, black, shaly
986	1016	30	Shale, dark-gray
1016	1055	39	Sandstone, light-brown to very light gray, medium-grained
1055	1060	5	Shale, dark-gray
1060	1075	15	Shale and siltstone, gray
1075	1085	10	Siltstone, gray
1085	1165	80	Sandstone, light-gray to white, medium-grained
1165	1175	10	Sandstone, white, coarse, 90%; gray shaly siltstone, 10%
1175	1183	8	Sandstone, white, medium-grained, nearly all quartz
1183	1195	12	Sandstone, white with a little brown stain, coarse
1195	1258	63	Sandstone, white to light-gray, medium-grained
1258	1263	5	Sandstone, white, coarse
1263	1293	30	Sandstone, white with a little brown stain, medium- to coarse-grained
1293	1331	38	Shale and siltstone, dark-gray
1331	1363	32	Siltstone, gray; also much very fine and mostly shaly gray sandstone
1363	1373	10	Shale, dark-gray, silty
1373	1393	20	Sandstone, white to gray, fine, 70%; dark-gray shale and siltstone, 30%
1393	1398	5	Sandstone, light-gray, fine
<del>1398</del> 1398	1408	10	Shale, dark-gray, silty, 50%; light-gray, fine to very fine sandstone, 50%

Top	Bottom	Thickness	
1408	1475	67	Sandstone, white, nearly all quartz, medium-grained
1475	1490	15	Sandstone, white, coarse- to medium-grained, nearly all quartz
1520	1533	13	Sandstone, white, very coarse
1533	1537	4	Shale, black, 50%; coal, 10%; dark-gray siltstone, 40%
1537	1539	2	Shale and siltstone, black
1539	1743	209	Sandstone, white, medium- to coarse-grained, nearly all quartz
1743	1760	12	Shale, gray, silty; contains siderite concretions
1760	1775	15	Shale, gray, silty with siderite concretions, 50%; white to gray fine sandstone, 50%
1775	1785	10	Sandstone, white, fine
1785	1820	35	Shale and siltstone, gray; also small amounts of coal, pyrite, siderite and fine sandstone (all seven samples from this interval are alike)
1820	1856	36	Shale, gray, soft, 60%; fine white sandstone, 40%
1856	1878	22	Sandstone, light-brown, medium-grained
<u>Mauch Chunk Group, 327 feet</u>			
1878	1881	3	Shale, green and gray, dolomitic, 70%; light-brown, dolomitic limestone, 30%
1881	1900	19	Shale, gray to green, silty, calcareous
1900	1915	15	Sandstone, gray, very fine, calcareous, 80%; gray shale and siltstone, 20%
1915	1969	54	Sandstone, white, fine, nearly all quartz; also small amounts of gray shale and siltstone; sandstone is mostly in small chips
1969	1978	9	Sandstone, light-brown, fine, highly calcareous
1978	2010	32	Shale, red, 50%; grayish-green shale and siltstone, 50%
2010	2030	20	Shale and siltstone, gray
2030	2045	15	Shale, gray; also small amounts of green and red
2045	2070	25	Shale, red, partly dolomitic
2070	2077	7	Shale, gray
2077	2140	63	Sandstone, white, fine, nearly all quartz; mostly broken in small chips

Top	Bottom	Thickness	
2140	2141	1	Dolomite, dark-gray
2141	2190	49	Limestone, dark-brown, with a few light spots; contains some fossils; a little gray chert, 2154-2190'
2190	2205	15	Shale, green, 50%; light-brown to nearly white limestone, 50% (driller's record gives "Pencil Cave", 2204-2207' and top of "Big Line at 2207')
<u>Greenbrier Limestone, 208 feet</u>			
2205	2235	30	Limestone, brown, mostly rather dark; small amount of gray shale
2235	2259	24	Limestone, light-brown
2259	2270	11	Limestone, nearly white, oolitic; visible pore space between oolites, 2259-2263' (gas 2260-2262')
2270	2300	30	Limestone, light-brown
2300	2350	50	Limestone, very light brown to nearly white, oolitic
2350	2371	21	Limestone, brown and red, oolitic
2371	2377	6	Limestone, brown, gray and red
2377	2395	18	Limestone, light-brown
2395	2406	11	Limestone, light-brown, oolitic
2406	2413	7	Limestone, light-brown, slightly dolomitic
<u>Macorady Formation, 37 feet</u>			
2413	2450	37	Siltstone, red
2450	2867	417	<u>Pacone Formation, 488 feet</u> Siltstone and shale, gray; some thin streaks of fine sandstone; this interval not described in detail (gas at 2522')
2867	2877	10	No sample
2877	2907	30	Shale, very dark gray to black (Sunbury Shale)
2907	2913	6	Sandstone, nearly white, medium-grained; strong concentration of pyrite and slight trace of sphalerite at top (Berea Sandstone, 2907-2938')
2913	2925	12	Sandstone, white, coarse
2925	2938	13	Sandstone, nearly white, fine
<u>Devonian Shales, 13+ feet</u>			
2938	2945	7	Siltstone, gray
2945	2951	6	Shale, gray, silty
	2951		Total depth