

Hacker Valley District, Webster County, W. Va.  
 By Tri-State Oil and Gas Company, Parkersburg, W. Va.  
 Located 0.4 mi. S. of 38° 40' and 3.0 mi. W. of 80° 20' — C—Hacker Valley  
 Quadrangle.

Elevation, 1945' ±.

Drilled Feb-1.

Drilled in 1945.

Section based on samples from surface to 3095', examined by J. H. C. Martens. No Berea Sand appears to be present and the rocks underlying the Greenbrier Limestone are of types which have generally been considered as belonging to the Catskill Formation.

9/10-f.  
 F/WEB-1  
 P

Top.	Bottom.	Thickness.	Description
			<u>Pottsville Formation, 5674' feet.</u>
0	16	16	Sand, light-brown, fine, clayey
16	26	10	Sandstone, light-brown to white, medium-grained
26	36	10	Sandstone, nearly white, medium-grained, 85%; gray shale and siltstone, 15%
36	50	14	Shale, gray to dark-gray
50	60	10	Shale, gray to dark-gray, 50%; gray siltstone, 50%
60	85	25	Shale, dark-gray to black
85	108	23	Shale, gray, mostly silty; a few fragments of light-brown and white shale with siderite spherulites
108	115	7	Siltstone, gray, 60%; light-gray, fine sandstone, 40%
115	118	3	Sandstone, white, medium-grained, 80%; black shale, 20%
118	140	22	Sandstone, white, fine- to medium-grained
140	145	5	Siltstone, dark-gray, sandy
145	156	11	Shale, dark-gray, 70%; gray siltstone, 30%
156	225	69	No samples
225	240	15	Siltstone, dark-gray, sandy
240	264	24	Sandstone, gray and brown, fine; contains siderite cement
264	273	9	Sandstone, nearly white, fine
273	290	17	Shale, very dark gray to black
290	312	22	Siltstone, gray
312	323	11	Shale, gray and dark-gray
323	338	15	Siltstone, gray, fine
338	356	18	Siltstone, gray, partly sandy
356	358	2	Sandstone, gray, very fine, silty
358	375	17	Shale, gray, very silty

410-B

375	384	9	Sandstone, nearly white, fine
384	389	5	Sandstone, white, medium-grained
389	392	3	Sandstone, white, medium-grained, 60%; gray siltstone, 40%
392	425	33	Sandstone, white, <del>white</del> to light-brown, medium-grained
425	430	5	Sandstone, white, medium-grained, 80%; dark-gray shale, 20%
430	434	4	Sandstone, white, medium-grained, 70%; dark-gray and brown shale, 30%
434	477	43	Shale, dark-gray, mostly very silty
477	484	7	Siltstone, gray
484	490	6	Sandstone, white, medium-grained
490	495	5	Sandstone, gray, very fine, with black shaly streaks
495	500	5	Shale, gray and light-brown, silty, 60%; very dark gray shale, 40%
500	505	5	Siltstone and shale, gray, 80%; black shale, 20%
505	510	5	Shale, gray, 90%; siderite, 10%
510	532	22	Siltstone, gray, fine and shaly, with fragments of siderite concretions
532	536	4	Siltstone, gray, sandy
536	552	16	Siltstone, dark-gray, fine, with small specks of siderite
552	562	10	Sandstone, white, fine, containing a little coal and siderite
562	567	5	Sandstone, white, medium-grained, 90%; siderite, 10%
<u>Mauch Chunk Group, 754 feet</u>			
567	570	3	Siltstone, gray, 50%; white, medium-grained sandstone, 50%
570	574	4	Shale, gray, green, and brown, calcareous; contains large amount of siderite
574	579	5	Shale, green, sandy and calcareous, 60%; light-brown limestone, 40%

910-c

579	584	5	Limestone, light-brown, very sandy
584	589	5	Shale, gray, sandy
589	595	6	Shale, gray, fine, distinctly laminated
595	614	19	Shale, dark-gray; a few siderite fragments
614	620	6	Shale, light-gray, very silty, calcareous
620	625	5	Siltstone, light-gray, fine, calcareous
625	640	15	Siltstone, light-gray, calcareous and dolomitic, 95%; siderite, 5%
640	644	4	Sandstone, light-gray, very fine, calcareous
644	647	3	Sandstone, white, with green specks, fine, calcareous, 70%; light-brown limestone, 30%
647	651	4	Limestone, light-brown, 70%; white, fine sandstone, 30%
651	656	5	Shale, gray and green
656	660	4	Siltstone, gray, calcareous
660	662	2	Sandstone, light-gray, very fine, slightly calcareous
662	667	5	Siltstone, gray, sandy
667	673	6	Sandstone, light-gray, with small yellow specks, very fine
673	685	12	Siltstone and silty shale, gray
685	689	4	Clay and soft shale, light-gray and light-green, with brown limestone nodules
689	703	14	Siltstone, green, calcareous
703	750	47	Shale, red, calcareous, with smaller amount of green calcareous shale
750	757	7	Siltstone, green, calcareous, 60%; red and green shale, 40%
757	937	180	Shale, red, dolomitic; small amounts of green shale and siltstone in several samples
937	941	4	Sandstone, light-green, very fine, slightly calcareous
941	1116	175	Shale, red, somewhat dolomitic; some green shale and siltstone in several samples

9102

1116	1117	1	Siltstone, green, 60%; red shale, 40%
1117	1126	9	Shale, red
1126	1132	6	Siltstone, green and red, 60%; red shale, 40%
1132	1147	15	Shale, red, partly calcareous
1147	1151	4	Siltstone, green, calcareous
1151	1158	7	Shale, red, silty
1158	1164	6	Siltstone, red
1164	1171	7	Shale, red, calcareous and dolomitic
1171	1172	1	Shale, red, 60%; brown and red dolomite, 40%
1172	1176	4	Siltstone, green and white, sandy
1176	1187	11	Siltstone, gray to greenish; also some red, gray, and green shale
1187	1201	14	Shale, red, partly dolomitic
1201	1209	8	Shale, gray, 60%; grayish-green siltstone, 40%; a few fossil fragments
1209	1224	15	Shale, gray, distinctly laminated
1224	1244	20	Limestone, dark-brown, with some lighter spots; also some shale, probably cavings
1244	1260	16	Limestone, brown to gray, fossiliferous, 60%; gray, laminated shale with some fossils, 40%
1260	1274	14	Shale, gray, calcareous; also some gray to brownish limestone
1274	1280	6	Siltstone, light-gray and light-green, coarse
1280	1291	11	Sandstone, very light brown, very fine
1291	1305	14	Siltstone, light-gray to greenish, coarse, slightly dolomitic
1305	1315	10	Siltstone, gray
1315	1316	1	Siltstone, light-gray, coarse, 60%; red and gray shale, 40%
1316	1321	5	Sandstone, light-gray, very fine, silty

910-E

M

Greenbrier Limestone, 245 feet

1321	1332	11	Limestone, dark brownish gray
1332	1336	4	Limestone, brown
1336	1345	9	Limestone, brown, oolitic
1345	1368	23	Limestone, light-brown; a few green shaly fragments
1368	1378	10	Limestone, brown to light-brown
1378	1384	6	Limestone, brown, slightly sandy; contains a few oolites
1384	1388	4	Limestone, very light brown, with many micro-fossils
1388	1397	9	Limestone, very light brown, oolitic
1397	1402	5	Limestone, very light brown
1402	1408	6	Limestone, light-gray, dolomitic
1408	1418	10	Limestone, light-brown
1418	1423	5	Limestone, light-brown, with a few oolites
1423	1428	5	Limestone, light-brown, oolitic, sandy
1428	1447	19	Limestone, light-brown
1447	1455	8	Limestone, light-brown, 70%; red fine siltstone and silty limestone, 30%
1455	1469	14	Limestone, very light brown, with a few red and green silty fragments
1469	1482	13	Limestone, very light brown
1482	1486	4	Limestone, light-green and nearly white, silty
1486	1494	8	Limestone, light-brown, oolitic, silty, and sandy; a few pieces of red and green limestone
1494	1499	5	Limestone, brown, oolitic, sandy
1499	1512	13	Limestone, very light brown, light-green, and red, silty
1512	1526	14	Limestone, very light brown
1526	1541	15	Limestone, light-brown, oolitic, slightly silty
1541	1566	25	Limestone, light-brown, slightly dolomitic; limestone is somewhat more dolomitic at base and contains a few coarse rounded grains of quartz sand

910-F

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Lower Mississippian (?) and Upper Devonian

1566	1573	7	No Sample
1573	1583	10	Shale, red and green, silty
1583	1588	5	Shale, red
1588	1594	6	Shale, red and green, 80%; green siltstone, 10%, coarse sandstone, 10%
1594	1600	6	Sandstone, white, coarse; also some very fine light-green sandstone
1600	1604	4	Sandstone, light-red, very fine
1604	1610	6	Sandstone, greenish, fine to coarse, 60%; red and green shale, 40%
1610	1616	6	Sandstone, greenish, fine to coarse, 80%; red and green shale, 20%
1616	1621	5	Shale, grayish-green, very silty
1621	1627	6	Shale and siltstone, grayish-green; also a few coarse sand grains, mostly broken
1627	1632	5	Siltstone, light-gray, coarse
1632	1640	8	Shale, gray, silty
1640	1646	6	Shale, gray, 60%; grayish-green siltstone, 30%; coarse white sandstone, 10%
1646	1657	11	Sandstone, light-gray, very fine
1657	1667	10	Sandstone, white, coarse, 80%; gray shale and siltstone, 20%
1667	1682	15	Sandstone, light-green, very fine
1682	1687	5	Sandstone, white to greenish, very coarse
1687	1700	13	Shale and siltstone, grayish-green, 60%; coarse sand, 30%; red siltstone, 10%
1700	1718	18	Siltstone, red and green, sandy
1718	1731	13	Siltstone, grayish-green
1731	1737	6	Sandstone, light-gray, fine, with some coarse grains, 80%; gray shale, 20%
1737	1750	13	Shale, gray
1750	1769	19	Shale, red, mostly silty
1769	1775	6	Shale, grayish-green

910-2

1775	1783	8	Sandstone, light-red, very fine
1783	1811	28	Shale, red, silty; also a little green shale and siltstone
1811	1826	15	Sandstone, light-red, very fine
1826	1843	17	Siltstone and shale, red
1843	1860	17	Siltstone, red and green, sandy
1860	1872	12	Shale and siltstone, red
1872	1878	6	Shale and siltstone, red
1878	1890	12	Siltstone, green, silty
1890	1960	70	Sandstone, light-gray and light-green, very fine
1960	2008	48	Shale, gray, silty
2008	2020	12	Siltstone, light-green, containing some coarse sand grains
2020	2040	20	Siltstone, red, sandy and shaly
2040	2054	14	Sandstone, light-gray, fine
2054	2070	16	Shale, gray
2070	2080	10	Shale, gray, 60%; light-brown coarse sandstone, 40%
2080	2087	7	Siltstone, grayish-green, sandy
2087	2092	5	Shale and siltstone, gray to grayish-green, 80%; coarse, white sandstone, 20% (gas, 17,000 cu. ft., 2087-2096)
2092	2096	4	Sandstone, nearly white, coarse, 70%; grayish-green silty shale, 30%
2096	2102	6	Shale, gray
2102	2150	48	Shale, gray, 70%; gray siltstone, 30%
2150	2172	22	Sandstone, light-gray, very fine, with a few coarse quartz grains
2172	2200	28	Shale, gray, with a little gray and green siltstone
2200	2207	7	Shale, gray, 60%; light-gray and green siltstone, 40%
2207	2238	31	Shale, gray, 70 to 90%; gray and green siltstone, 30 to 10%
2238	2246	8	Siltstone, light-green, coarse, 50%; gray shale, 50%
2246	2310	64	Siltstone, light-green

910-14

2310	2340	30	Siltstone, grayish-green, 60%; gray shale, 40%
2340	2360	20	Sandstone, light-green, very fine
2360	2382	22	Siltstone, gray, green, and red, 70%; gray shale, 30%
2382	2387	5	Shale, gray, 50%; grayish-green siltstone, 50%
2387	2407	20	Shale, gray, 40%; gray and green siltstone, 40%; red siltstone, 20%
2407	2417	10	Sandstone, light-gray and light-green, very fine, slightly calcareous, 70%; gray shale, 30%
2417	2444	27	Shale, gray and dark-gray, 50 to 70%; gray and green siltstone, 50 to 30%
2444	2464	20	Siltstone, gray and green, 70%; gray shale, 30%
2464	2471	7	Siltstone, light-green, calcareous, containing some fossil shells
2471	2479	8	Shale and fine siltstone, gray
2479	2604	125	Siltstone, gray to grayish-green, with a few fossil shells, 70 to 90%; gray shale, 30 to 10%
2604	2654	50	Shale, gray, silty, 50 to 70%; gray and green siltstone, 50 to 30%
2654	2660	6	Siltstone, gray, calcareous, with a few fossil shells
2660	2680	20	Shale, gray, silty
2680	2704	24	Siltstone, gray to grayish-green, 70%; gray shale, 30%; a few fossil fragments in the siltstone
2704	2720	16	Shale, gray, 50%; grayish-green siltstone, 50%
2720	2731	11	Siltstone, gray to grayish-green, slightly cal- careous, 70%; gray shale, 30%
2731	2828	97	Shale and siltstone, gray to grayish-green
2828	2870	42	Siltstone, green, 70 to 90%; gray shale, 30 to 10%
2870	3025	155	Siltstone, gray, dark-gray, and grayish-green, 60 to 80%; gray shale, 40 to 20%; a few fossil shells in the siltstone
3025	3089	64	Siltstone, brown, gray, and grayish-green, 80%; gray shale, 20%
3089	3109	20	Siltstone, gray, fine, 80%; gray shale, 20%



910-I

3109	3119	10	Siltstone, gray and brown, fine and shaly
3119	3141	22	Siltstone, gray, fine and shaly
3141	3439	298	Siltstone and shale, gray to dark-gray; most of the siltstone is fine and there is every gradation from shale to siltstone
3439	3461	22	Shale, dark-gray, silty, 60%; gray siltstone, 40%
3461	3647	186	Shale and siltstone, gray to dark-gray
3647	3687	40	Shale, dark-gray, 70%; gray siltstone, 30%
3687	3735	48	Siltstone, gray, fine, 60%; dark-gray shale, 40%
3735	3773	38	Shale, dark-gray, 70%; gray siltstone, 30%
3773	3781	8	Siltstone, gray, 60%; dark-gray shale, 40%
3781	3803	22	Shale, dark-gray, with smaller amount of gray siltstone
3803	3839	36	Siltstone, gray, 60%; dark-gray shale, 40%
3839	3845	6	Siltstone, brown
3845	3866	21	Shale and siltstone, gray to dark-gray
3866	3873	7	Siltstone, gray, fine
3873	3903	30	No samples
3903	3995	92	Shale and fine siltstone, gray to dark-gray

