

GODFREY L. CABOT, INC. #1115

C. E. Guinn #1

Richmond District, Raleigh County, W. Va.
 Located 3.27 Mi. S. of 37° 50' and 4.62 Mi. W.
 of 80° 50' - SC - Meadow Creek Quadrangle
 Elevation - 1294' L.

Permit (Ral-36)

Drilling commenced - Sept. 14, 1943

Completed - April 19, 1944

Shot - April 24, 1944, at 6320 to 6340
 with 40 Qt.

Volume - Before shot 15,000 Cu. Ft.

2½ Hrs. A/S - 21,000 Cu. Ft.

Fresh water - 40'; Hole full; 60', Hole full; 440',
 Hole full

Oriskany Sand acidized May 8, 1944. Gauge before
 acidizing - 15,000 Cu. Ft.; Gauge after acidizing
 4,000 Cu. Ft.

CASING RECORD

16"	22'
13"	51'
10"	737'
8"	1944'
7"	6205'

Section based on samples from 779' to 3200', 3600' to 5287' and
 5890' to 6395', examined by J. H. C. Martens. The Berea Sandstone could not be
 definitely identified.

Mauch Chunk Group
960 Feet (From surface)

<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>FORMATION</u>
779	785	6	Shale and siltstone, gray, 90%; gray, partly oolitic limestone, 10%; abundant fragments of marine fossils
785	794	9	Siltstone, gray, sandy, slightly calcareous
794	801	7	Shale, gray, fossiliferous, 60%; gray to brownish fossiliferous limestone, 40%
801	810	9	Limestone, dark-gray
810	878	68	Shale, dark-gray, with a few pyrite concretions
878	890	12	Limestone, gray, with many small specks of pyrite
890	904	14	Shale, gray, highly calcareous and fossiliferous
904	919	15	Shale, gray to grayish-green, highly calcareous and fossiliferous
919	944	25	Limestone, gray and light-brown, highly fossiliferous, 80%; gray to greenish shale, 20%
944	960	16	Shale, dark-gray, highly calcareous

Greenbrier Limestone
663 feet

960	968	8	Limestone, dark brownish gray
968	1004	36	Limestone, light-gray, 80%; green shaly limestone, 20%
1004	1014	10	Limestone, dark-brown
1014	1032	18	Limestone, light-brown, with indistinct oolites
1032	1063	21	Limestone, brown to gray, oolitic
1063	1084	21	Limestone, brown, with some indistinct oolites
1084	1111	27	Limestone, brown to light-brown, partly oolitic
1111	1145	34	Limestone, brown
1145	1148	3	Limestone, gray, somewhat silty
1148	1156	8	Limestone, light-brown, oolitic
1156	1192	36	Limestone, very light brown to light brown
1192	1200	8	Limestone, light-brown, also some gray and green limestone

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Greenbrier Limestone

<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>FORMATION</u>
1200	1207	7	Limestone, light-brown, with some small oolites
1207	1223	16	Limestone, light brown
1223	1281	58	Limestone, brown
1281	1286	5	Limestone, brown, slightly dolomitic
1286	1303	17	Limestone, brown, oolitic
1303	1311	8	Limestone, brown and grayish-green, partly silty
1311	1319	8	Limestone, light-red
1319	1327	8	Limestone, light-gray, very fine textured
1327	1352	25	Limestone, very light brown of light gray, with reddish spots
1352	1385	33	Limestone, light-brown and light-gray
1385	1395	10	Limestone, white and light-brown, oolitic, partly dolomitic, contains some small transparent quartz crystals (gas 1390', 15,000 Cu. Ft., exhausted)
1395	1428	33	Limestone, light-brown
1428	1446	18	Limestone, light-brown, 90%; light-green limestone, 10%
1446	1451	5	Limestone, light-brown
1451	1461	10	Limestone, very light brown, 85%; light green limestone, 10%; light-gray and orange chert, 5%
1461	1472	11	Limestone, brown
1472	1487	15	Limestone, very light brown with reddish specks, 80%; light-green limestone, 15%; light gray and orange chert, 5%
1487	1492	5	Limestone, very light-brown, with a little light-gray chert
1492	1497	5	Limestone, light-gray, with a little gray chert
1497	1523	26	Limestone, gray to light-gray, very fine textured, dolomitic
1523	1532	9	Limestone, grayish-green, very fine textured, highly dolomitic

Macerady Formation
52 Feet

1532	1548	16	Shale, red, dolomitic, 90%; white anhydrite, 10%; at least part of the anhydrite is actually enclosed in the shale rather than occurring in separate layers
1548	1558	10	Shale, red, dolomitic
1558	1568	10	Shale, grayish-green, silty, 90%; red shale, 10%
1568	1584	16	Siltstone, red and green, slightly dolomitic, containing a few grains of rather coarse sand

Pocono Formation and
Devonian Shales - 4614 feet

1584	1599	15	Siltstone, gray, coarse
1599	1613	14	Siltstone, gray to grayish-green, 70%; dark gray, silty shale, 30%
1613	1623	10	Siltstone, light-gray
1623	1640	17	Siltstone, gray, shaly, 90%; dark-gray shale, 10%
1640	1646	6	Siltstone, light-gray
1646	1693	47	Siltstone and shale, gray; most with siltstones fine and shaly

Pocono Formation and
Devonian Shales - 4614 feet

<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>FORMATION</u>
1693	1743	50	Siltstone, light-gray, 90% to 95%; very dark brownish gray shale, 10 to 5%; some of siltstone is slightly dolomitic
1743	1758	15	Siltstone, light-gray, with brown specks, dolomitic
1758	1783	25	Siltstone, gray, fine
1783	1792	9	Siltstone, light-gray, dolomitic, with a few coarse sand grains
1792	1811	19	Siltstone, gray to light gray, 80%; very dark gray shale, 20%
1811	1847	36	Shale and siltstone, gray; most of siltstone is fine and shaly; less siltstone toward bottom
1847	1890	43	Shale, dark-gray, partly silty
1890	1915	25	Sandstone, very light-gray; mostly fine, with a few coarser quartz grains; coating of white clayey material on many grains
1915	1925	10	Sandstone, nearly white, fine to very fine
1925	1931	6	Sandstone, light-gray, medium-grained, 80%; very dark gray shale, 20%
1931	1962	31	Shale, very dark gray, 70 to 80%; light-gray to greenish, very fine, sandstone, 30 to 20%
1962	1971	9	Shale, dark-gray, 60%; gray to greenish siltstone and very fine sandstone, 40%; a very little coal
1971	2006	35	Shale, dark-gray, 70%; light-gray and light-green siltstone and very fine sandstone, 30%
2006	2013	7	Siltstone, light gray, sandy, 60%; gray silty shale, 40%
2013	2022	9	Siltstone, light-gray, sandy
2022	2037	15	Sandstone, light gray, very fine, 60%; very dark gray shale, 40%
2037	2040	3	Sandstone, very light gray, fine, with a few coarser grains, 80%; very dark gray stickensided shale, 20%
2040	2070	30	Sandstone, light-gray, very fine, 70%; very dark gray shale, 30%, (one sample)
2070	2088	18	Shale, dark-gray, 60%; light-gray, sandy siltstone, 40%
2088	2142	54	Shale, gray to dark-gray, 60 to 80%; coarse, sandy siltstone, 40 to 20%
2142	2199	57	Siltstone, gray, shaly, with small amounts of darker gray, silty shale
2199	2230	31	Shale and siltstone, gray
2230	2246	16	Siltstone, dark-gray, shaly, with some silty shale
2246	2253	7	Siltstone, light-gray
2253	2282	29	Siltstone, gray to dark-gray, shaly
2282	2306	24	Shale, dark-gray, very silty
2306	2320	14	Shale, very dark gray
2320	2368	48	Shale, very dark gray, 50 to 60%; gray shale, 50 to 40%
2368	2410	42	Shale and shaly siltstone, gray
2410	2420	10	Siltstone, dark-gray and light-gray
2420	2449	29	Shale, gray, partly silty
2449	2514	65	Shale and siltstone, gray
2514	2526	12	Siltstone, gray and light-brown
2526	2562	36	Shale, gray, with small amount of gray siltstone
2562	2570	8	Siltstone, nearly white, coarse, slightly dolomitic
2570	2612	42	Shale and siltstone, gray
2612	2636	24	Shale, gray to dark-gray, partly silty

Pocono Formation and
Devonian Shales - 4614 Feet

<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>FORMATION</u>
2636	2690	54	Shale and siltstone, gray
2690	2761	71	Shale, gray, with small amount of gray siltstone
2761	2796	35	Shale, gray, 70 to 80%; gray siltstone 30 to 20%
2796	2845	49	Shale, gray, with a very little siltstone
2845	3035	190	Siltstone, light-gray to white and light-green, 70 to 90%; darker gray shale, 30 to 10%
3035	3042	7	Siltstone, dark-gray
3042	3089	47	Siltstone, gray to light-gray, fine
3089	3145	56	Shale and siltstone, gray
3145	3167	22	Siltstone, light-gray to greenish
3167	3200	33	Siltstone, gray, with small amount of gray shale
3200	3600	400	No Sample
3600	3630	30	Shale, dark-gray, 50%; gray siltstone, 50%
3630	3670	40	Shale, dark-gray; a little nearly black shale, and a little lighter gray siltstone
3670	3694	24	Siltstone, gray, shaly, 60%; gray to dark-gray shale, 40%
3694	3717	23	Shale, dark-gray to nearly black, with small amount of lighter gray siltstone
3717	3731	14	Shale, dark-gray, 50%; gray-siltstone, 50%
3731	3761	30	Shale and fine siltstone, gray to dark gray, 70%; black shale, 30%
3761	3794	33	Shale and fine siltstone, gray; some of shale is very dark
3794	3804	10	Shale and Siltstone, gray, 80%; very dark gray shale, 20%
3804	3939	135	Shale, gray, with small amounts of gray siltstone and very dark gray shale
3939	3977	38	Shale, dark-gray to very dark gray
3977	4175	198	Shale, gray to very dark gray, 70%; gray shaly siltstone, 30%
4175	4287	112	Shale, gray to very dark gray, with small amount of gray siltstone
4287	4687	400	Shale and fine siltstone, gray
4687	4962	275	Shale, dark-gray to very dark gray (only three samples)
4962	5007	45	Shale, dark-gray
5007	5067	60	Shale, very dark gray to black; a little yellow dolomite in small veins
5067	5147	80	Shale, dark-gray, 60%; very dark gray to black shale, 40%
5147	5287	140	Shale, very dark gray to black; small amount of lighter gray shale and siltstone
5287	5890	603	No Samples
5890	6107	217	Shale, very dark gray to black; a few fragments of vein calcite in several samples
6107	6171	64	No Samples
6171	6185	14	Shale, black, with white calcite veins (Gas at 6171')
6185	6198	13	Shale, very dark gray to black, highly calcareous; may include some impure limestone
			<u>Huntersville Chert</u> <u>75 Feet</u>
6198	6218	20	Chert, very dark gray, highly calcareous and slightly dolomitic

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Huntersville Chert
75 Feet

<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>FORMATION</u>
6218	6224	6	Chert, dark-gray and white, calcareous
6224	6235	11	Chert, dark-gray, calcareous and silty; contains a little glauconite; also small amount of rather pure light gray chert
6235	6250	15	Chert, dark-gray, very silty; contains some dolomite and glauconite
6250	6259	9	Chert, dark-gray, slightly calcareous
6259	6273	14	Chert, gray, calcareous
<u>Oriskany Sandstone</u> <u>66 Feet</u>			
6273	6278	5	Sandstone, light-gray, fine, calcareous
6278	6297	19	Sandstone, gray, fine, highly calcareous and fossiliferous
6297	6307	10	Limestone, light-gray, sandy, fossiliferous
6307	6339	32	Sandstone, very light gray, fine, highly calcareous, fossiliferous
<u>Halderburg Group</u> <u>55 Feet</u>			
6339	6352	13	Limestone, gray, fossiliferous, cherty
6352	6383	31	Sandstone, very light gray, fine to very fine
6383	6390	7	Limestone, gray, sandy, fossiliferous, slightly cherty
6390	6395	5	Limestone, gray, slightly cherty
	6397'		TOTAL DEPTH