

Vol. XVII 1P 35
published

Freemans Creek District, Lewis County, W. Va.
 By Pittsburgh & W. Va. Gas Co., Clarksburg, W. Va.
 Drilled under permit Len-37.
 On 36.07 acres; Vadsis 3/4 3-2 quadrangle.
 Elevation, 906' L.
 Surface and minerals owned by L. C. Waugh, Vadsis, W. Va.
 Drilling commenced March 1, 1939; completed, April 1, 1939.
 Shot April 6, 1939, at 1776-1786m'.
 Fresh water at 60 and 200'. Salt water at 570'.
 1 1/2" wood conductor, 16'; 10" casing, 153'; 8 1/2", 434'; 6 1/2", 1666'.
 Anchor packer, 8 1/2" x 6", set at 1364'.
 Coal was encountered at 133-137, 864-869, 960-961, and 1180-1181'.
 Dry hole. Completion reported to Dept. of Mines May 16, 1939.
 Record to RCT from Mrs. Griffith May 21, 1939.

	Top.	Bottom.
Clay, brown, soft	0	18
Sand, brown, open	18	32
Slate, white, soft	32	52
Line, white, open (water, 60', 1 bailer per hour)	52	73
Slate, white, soft	73	80
Red rock, soft	80	107
Sand, white, open	107	121
Slate, white, soft	121	133
Pittsburgh Coal, black, soft	133	137
Slate, white, soft	137	158
Line, gray, hard	158	170
Slate, white, soft	170	193
Line, gray, hard (water, 200', hole full)	193	200
Sand, white, open	200	221
Slate, white, soft	221	234
Red rock, soft	234	273
Slate, white, soft	273	294
Red rock, soft	294	323
Line, white, hard	323	334
Red rock, soft	334	412
Line, gray, open	412	427
Sand, white, open	427	455
Line, gray, open	455	475
Slate, white, soft	475	486
Red rock, soft	486	498
Line, white, hard	498	524
Slate, white, soft	524	566
Little Dunkard Sand, white, open (water, 570', 1 1/2 bailers per hour)	566	600
Slate, white, soft	600	604
Sand, white, hard	604	625
Slate, dark, soft	625	630
Big Dunkard Sand, white, hard	630	725
Slate and shell, white, hard and soft	725	758
Line, white, hard	758	772
Slate and shells, dark, hard and soft	772	864
Coal, black, soft	864	869
Slate and shells, dark, hard and soft	869	909
1st Salt Sand, white, open	909	960
Coal, black, soft	960	961

L. C. WAUGH NO. 1 (7653) WELL (Continued).

	Top.	Bottom.
Slate and shells, dark, hard and soft	1016	- 1140
2nd Salt Sand, white, hard	1140	- 1180
Coal, black, soft	1180	- 1181
2nd Salt Sand, white, hard	1181	- 1192
Slate, black, soft	1192	- 1204
Lime, black, hard	1204	- 1225
3rd Salt Sand, black, hard (show gas, 1313') (S.M., 1313')	1225	- 1454
Red rock, soft	1454	- 1486
Lime, dark, hard	1486	- 1512
Slate and shells, white, hard and soft	1512	- 1544
Lime, dark, hard	1544	- 1562
Slate and shells, white, hard and soft	1562	- 1602
Little Lime, dark, hard	1602	- 1626
Pencil Cove, white, soft	1626	- 1637
Big Lime, white, hard (S.M. at 1666')	1637	- 1698
Big Injun Sand, white, hard (show oil, 1775-1785')	1698	- 1799
Slate, white, soft	1799	- 1803
Lime, white, open	1803	- 1822
Squaw shells, white, hard and soft	1822	- 1862
Squaw Sand, gray, hard	1862	- 1990
Slate-Shells, white, hard and soft	1990	- 2072
Lime, dark, hard	2072	- 2110
Slate-Shells, white, hard and soft	2110	- 2243
Lime, black, hard	2243	- 2280
Slate and shells, white, hard and soft	2280	- 2405
Total depth		2405

L. P. Waugh #1
(7653) Well

in Vadi's @

Logged

1200	1210	10	Siltstone, gray, of sandy nature, studded with specks of siderite
1210	1220	10	Siltstone, as above, 50% (II) Siltstone, white, an extremely fine sandstone, studded with specks of siderite
1220	1230	10	Samples missing
1230	1237	7	Sandstone, white, very fine-grained, angular, slightly frosted containing a little amount of chlorite and siderite
1237	1261	24	Sandstone, as above, but a little coarser grained
1261	1273	12	Shale, gray, slightly silty, 80% (II) Shale, gray, 10% (III) Sandstone, due, very probably, toavings from above, 10%
1273	1283	10	Sandstone, white, very fine to fine-grained, subangular, slightly frosted, 80% (II) Shale, gray, slightly silty, probably due toavings from above.
1283	1293	10	Sandstone, as above, containing few flakes of chlorite and a white sideritic cement.
1293	1313	20	Sandstone, as above, much coarser and frosted

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| 1313 | 1319 | 6 | Shale, dark-gray, 45% (II) Shale, brown, 5%
(III) Sandstone, as above, 50% |
| 1319 | 1328 | 9 | Shale, dark-gray, 95% (II) Shale, brown, 5% |
| 1328 | 1338 | 10 | Shale, dark-gray, as above, slightly silty |
| 1338 | 1346 | 8 | Shale, as above, with specks of siderite,
(II) Sandstone, white, angular, slightly
frosted, ^{fine-grained} containing flake of muscovite,
chlorite, some siderite and carbonaceous
material |
| 1346 | 1394 | 48 | Sandstone, as above, a little coarser |
| 1394 | 1410 | 16 | Sandstone, as above, medium-grained,
containing a large amount of very coarse
grains of angular milky quartz |
| 1410 | 1424 | 14 | Sandstone, as above, minus the grains of
milky quartz |
| 1424 | 1431 | 7 | Sandstone, white, containing a large amount
of silt embedding coarser grains of
quartz sand |
| 1431 | 1437 | 6 | Sandstone, white, fine-grained, angular,
containing a large amount of angular
milky quartz grains |

1437	1445	8	Sandstone, as above, 75% (II) Shale, gray, 25%
1445	1453	8	Sandstone, as above
1453	1471	18	Shale, red, 85% (II) Shale, green, 15%
1471	1481	10	Shale, green, silty, 75% (II) Shale, gray, 20% (III) Shale, red, 5%
1481	1505	24	Siltstone, green, shaly
1505	1512	7	Siltstone, as above, 55% (II) Limestone, brown often occurring as pteridites in the silt
1512	1521	9	Shale, red, 90% (II) Shale, gray, 10%
1521	1537	16	Siltstone, light-gray, 95% (II) Shale, gray, 25% (III) Shale, red, 50%
1537	1544	7	Shale, light-green, 55% (II) Siltstone, as above, 10% (III) Shale, red, 30% (IV) Limestone, light-brown, 5%
1544	1549	5	Siltstone, light-green, 75% (II) Shale, red, 25%
1549	1556	7	Siltstone, light-green, shaly, 75% (II) Shale, brownish-gray, 25%
1556	1566	10	Shale, red, 80% (II) Shale, light-green, 20%

- 1566 1580 14 shale, brownish-gray, 85% (II) shale, red, 10% (III) shale, light-green, clayey, calcareous, effervescing in HCl, 5%. The calcareous facies is in the upper 7 feet only; the lower horizon is non-calcareous.
- 1580 1589 9 shale, gray, 75% (II) shale, red, 5% (III) shale, green, 5% (IV) limestone, brown, 15
- 1589 1604 15 shale, gray, 90% (II) limestone, gray, 10%
- 1604 1610 6 limestone, brown to grayish-brown, dolomitic
- 1610 1618 8 limestone, brown, somewhat oolitic, 95% (II) shale, green, 2% (III) shale, gray, 3%
- 1618 1623 5 shale, gray, calcareous, fossiliferous, effervescing in HCl, 80% (II) limestone, brownish-gray, 20%

Pencil Cove

- 1623 1637 14 shale, light-gray, 80% (II) shale, dark-gray, slightly calcareous, 20%

Greenbrier Ls, 152 feet

- 1637 1640 3 limestone, light-brown, compact, 80% (II) limestone, dark-gray, 20%
- 1640 1645 5 limestone, grayish-brown, 95% (II) shale, light-green, 5%

1784
1637
152

- 1645 1658 13 Limestone, light brown, 85% (II) Shell light-green to gray, thinly laminated & tending to disintegrate, along the laminar planes, as the Penial Cave, 15%
- 1658 1678 20 Limestone, light brown
- 1678 1695 17 Limestone, compact, brown to dark-brown
- 1695 1700 5 Limestone, as above, 40% (II) Sandstone, white, very fine-grained with larger, clear, rounded quartz grains embedded in a limy cement, 60%
- 1700 1705 5 Limestone, light brown, containing a very large percentage of fine grains clear, rounded to subrounded grains of quartz
- 1705 1710 5 Limestone, light-brown with very few grains of quartz
- 1710 1720 10 Sandstone, white very fine-grained, angular to subrounded having a limestone cement.
- 1720 1736 16 Sandstone, as above containing ^{in addition} coarser grains of frosted rounded or subangular quartz grains. It effervesces in HCl

1736	1746	10	Limestone, brownish-white, compact
1746	1766	20	Limestone, brownish-white, of saccharoidal appearance, owing to the presence of dolomite rhombohedrons
1766	1789	23	Limestone, as above, containing, in addition a large amount of subangular to rounded, clear to frosted grains of quartz
1789	1799	10	Shale, greenish-gray, disintegrating in water
1799	1823	24	Shale, gray, somewhat silty
1823	1831	8	Siltstone, greenish gray
1831	1850	19	Siltstone, as above, 75% (II) Shale, brownish-gray, 25%
1850	1860	10	Siltstone, gray
1860	1910	50	Siltstone, very light gray, of sandy nature, containing small plates of muscovite, chlorite and specks of siderite
1910	1949	39	Siltstone, as above, 95% (II) Shale, gray, 5%
1949	1954	5	Sediments as above, 85% (II) Shale, yellowish-red, 15%
1954	1973	19	Siltstone, very light-gray, of sandy nature, as above

1973	2002	30	Siltstone, gray, somewhat shaly
2003	2032	99	Siltstone, as above, 75% (II) Shale, gray, 25%
2032	2050	18	Shale, gray & medium-gray
2050	2072	29	Shale, as above, 97% (II) Shale, brown, 3%
2072	2078	6	Siltstone, brown, 75% (II) Shale, gray, 25%
2078	2091	13	Siltstone, light-gray & gray, somewhat shaly, 70% (II) Shale, gray, 30%
2091	2099	8	Shale, gray, somewhat silty
2099	2107	8	Shale, gray, 25% (II) Shale, gray, of lighter hue, somewhat silty, 55% (III) Shale, light-gray, 20%
2107	2115	8	Shale, light-gray, with a greenish hue, 90% (II) Shale, brown, 10%
2115	2125	10	Shale, greenish-gray
2125	2159	34	Shale, as above, 97% (II) Shale, brown, 3%
2159	2160	1	Shale, gray, 50% (II) Siltstone, very light gray of sandy nature, with a few specks of siderite

2159	2164	5	Siltstone, very light-gray, as above, of sandy nature, with a medium of chlorite and specks of siderite, 70% (II) Shale, gray, 30%.
2164	2173 ²	9	Shale, gray
2173	2181	8	Shale, gray, 95% (II) Shale, brown, 5%
2181	2190	9	Shale, chocolate brownish-gray, 85% (II) Siltstone, white, of sandy nature, 15%
2190	2199	9	Shale, gray
2199	2207	8	Shale, gray, slightly silty
2207	2223	16	Shale, gray, 88% (II) Shale, light-brown, 10% (III) Shale, green, silty, 2%
2223	2229	6	Shale, gray, 85% (II) Shale, green, 15%
2229	2236	7	Shale, gray, 85% (II) Shale, green, 10% (III) Shale, red, 5%
2236	2241	5	Shale, gray, 80% (II) Shale, brown, 3% (III) Shale, red, 2% (IV) Siltstone, greenish-gray, 15%
2241	2248	7	Shale, ^{greenish} gray, silty, 70% (II) Shale, ^{greenish} gray, 30%

- 2248 2255 7 Sediments $\frac{1}{2}$ above, 98% (I) Siltstone, white,
- 2255 2280 25 Shale, very light grayish-white, silty, ^{and calcareous} 60%
 (II) Shale, gray, to greenish-gray, 30%
 (III) Shale, brownish-gray, 10%
- 2280 2286 6 Shale, gray to brownish-gray
- 2286 2302 16 Shale, greenish-gray
- 2302 2358 56 Siltstone, green, chaly, 30% (II) Shale, greenish-gray, 30% (III) Shale, red; below the upper ten feet, the red component becomes as high as 60%, while the others diminish
- 2358 2363 5 Shale, grayish-green, 50% (II) Shale, red, 50%
- 2363 2380 17 Shale, gray to grayish-green
- 2380 2405 25 Shale, grayish-green, 25% (I) Shale, gray, with a brownish hue, 25%