Rowland Land Company No. 2 (GW - 679) Well

Marsh Fork District, Raleigh County, W. Va.

By Columbia Carbon Company, Charleston, W. Va.

Located 2.2 Mi. S. of 37° 50' and 3.3 Mi. W. of 81° 25' - SW -

Recles Quadrangle.

Elevation, 1712.0' L. (ground).

Permit Ral. - 18.

Drilling commenced July 1, 1942; completed Feb. 22, 1943.

Dry Hole

151

173

181

205

173

181

205

210

22

8

24

5

Fresh Water at 12 and 145'.

Salt water at 2228, 2255, and 2695'.

18 5/8 " casing, 45' 7"; 13 5/8, 750'3" (pulled); 105/4", 1957' 8" (pulled); 8 5/8", 2627' 4" (Pulled).

Section based on samples from 55 to 3554; examined by J. H. C. Martens.

			Pottsville Formation, 1278 Feet.
0	26	26	"Gravel" (water 18')
26	54	8	"Sand"
34	55	81	"Slate"
5 5	63	8	Shale, dark-gray to black
63	70	7	Siltatone, gray, sandy
70	92	82	Siltatone, gray, shaly, micaceous
92	101 105	9	Shale, dark-gray, silty
101	194	4	Shale, dark-gray, silty, 80%; light-brown fine sandstone,
105	118	13	Sandstone, light-gray, fine, with brown and green specks,
			50%; dary-gray silty shale 50%
118-	123	5	Shale, dark-gray, silty
123	151	28	Sandstone, light-gray, medium-grained; contains many
			greem grains (fresh water, 145', 4 - 14" bailers per
			hour)

Sandstone, gray, very fine with thin black carbonaceous

Shale, dark-gray, silty

Sandstone, light-gray, fine

Siltstone, black

streaks

```
210
      218
             8
                   siltatone, 30%
218
      276
             58
                  Sandstone, white to light-gray, very fine, with
                   fairly high proportion of quarts
276
       289
             15
                  Sandstone, white, fine, nearly all quarts; mostly
                   broken into individual grains, many of which have
                   crystal faces
289
       295
              6
                  Sandstone, light-gray, coarse
295
       312
             17
                  Sandstone, light-gray to white, fine- to medium-grained
312
-318
       316
              4
                  Shale, black, silty
316
       330
             14
                  Sandstone, white, coarse to very coarse and pebbly
                  Sandstone, white with some rust stains, medium- to
330
       346
             16
                   coarse-brained
346
       357
             11
                  Sandstone, gray, fine, with some very coarse grains
357
      362
              5
                  Sandstone, gray, fine
362
       373
             11
                  Sandstone, gray, medium- to coarse-grained, poorly sorted
                  Sandstone, white, medium-grained
373
       384
             11
                  Sandstone, white, very coarse, pebbly
384-392
              8
392
       403
             11
                  Shale, dark-gray
403
       408
                  Shale, dark-gray, 70%; gray sandy siltstone, 30%;
              5
                   trace of coal
408
      419
             11
                  Siltstone and silty shale, gray
419
      425
             6
                  Shale, very dark-gray, silty
425
      439
             14
                  Sandstone, light-gray, very fine
439
                  Shale, black, silty
      445
              6
445
      450
              5
                  Siltstone, gray, coarse
450
      469
             19
                  Sandstone, gray, very fine, with a little darker gray
                   shake and siltstone
469
      475
             6
                  Sandstone, gray, very fine, 70%; black shale, 30%
475
      487
                  Siltstone, gray, very sandy
            12
487
      508
            21
                  Shale, black silty, 60 to 80%; gray siltatone, 40
                  to 20%
508-
      515
             5
                 Shale, dark-gray, distinctly laminated
513
                 Shale, dark-gray, 50%; gray siltstone 50%
      518
            5
518
      535
            17
                 Siltstone and silty shale
535
      540
             5
                 Siltstone, light-gray, coarse
540
      547
             7
                 Siltstone, dark-gray, shaly
```

Sandstone, light-gray, fine 70%; dark-gray, shaly

```
447
        553
                   Shale, very dark gray, silty
               6
  553
        560
               7
                   Shale, very dark gray, silty, 50%; gray siltatone 50%
  560
        564
                   Siltstone, dark-gray, shaly
  564
                   Shale, dark-gray, silty
        568
               4
  568
        585
              17
                   Sandatone, light-gray, very fine
  585
        596
              11
                   Sandstone, white, with some rust stain, fine
                   Sandstone, white, with some rust stain, medium-grained,
  596
        657
              61
                    nearly all quasts; mostly broken into individual grains
  657
        673
                   Sandstone, white with some rust stain, fine, nearly
              16
                    all quarts
                   Sandstone, light-gray, very fine
  673
        709
              36
                   Sandstone, white, fine- to medium-grained, nearly all
  709
        810
             101
                    quarts; som rust stain throughout
  810
        876
                   Sandstone, white, coarse- to medium-grained, nearly all
              66
                    quarts
  876
        882
                   Sandstone, white, fine
 882
        885
               3
                   Siltatone, gray, sandy
 885
        906
              21
                   Shale, dark-gray, very silty
 906
                   Shale, dark-gray, 70%; light-gray fine sandstone, 30%
        911
               5
 911
        919
                   Sandstone, gray, fine
               8
 919
       926
                   Siltstone, gray to black, with some coal and black shale
               7
 926
       933
                   Shale, dark-gray, very silty
 933
       947
              14
                   Sandstone, light-gray, very fine
 947
      1009
                   Sandstone, white, fine, nearly all quarts
              62
1009
      1128
                   Sandstone, white, fine to coarse, nearly all quarts;
            119
                    considerable amount of rust stain throughout
1128
      1168
                   Sandstone, white, fine, nearly all quarts
              40
                   Sandstone, white, coarse; some very coarse grains and
1168
      1174
              6
                   pebbles at bottom
1174
     1177
              8
                   Shale, black, silty
1177
      1185
                  Shale, dark-gray
              8
1185
      1196
             11
                  Shale, very dark gray, silty
1196
     1202
                  Sandstone, gray, fine
              6
1202
     2210
              8
                  Siltstone, gray, sandy
1210
      1218
                  Siltatone, gray, shaly, micaceous
              8
```

Shale, dark-gray, silty, micaceous

```
1225 1242
             17
                   Shale, black, highly carbonaceous, with a little coal
1242
      1265
             23
                   Siltstone, gray with black streaks, very sandy
                   Siltatone, very dark gray
1265 1278
              13
                    Mauch Chunk Group, 1160 feet
1278
      1285
              7
                   Shale, gray and light-gray
1285
      1308
              23
                   Siltstone, light-gray, fine, with siderite spherulites
1308 1315
              7
                   Shale, grayish-green, very silty, 80%; very dark gray
                    shale, 20%
1315 1323
              8
                   Shale, dark-gray and grayish-green, very silty
      1339
1323
             16
                   Siltstone, gray, sandy, micaceous
1389 1355
             16
                   Shale, dark-gray, distinctly laminated
1355
                   Siltstone, gray
      1363
              8
1363
                   Shale, dark gray
      1375
              12
1375
     1382
             STaleShale and siltstone, grayish-green, small amount of
                   brown dolomitic limestone
1382
      1388
              6
                   Shale, dark-gray, silty, micaceous
1388
      1395
              7
                   Sandstone, gray, very fine, silty
1395
      1407
                   Sandstone, light-gray, fine
             12
1407 1422
             15
                   Sandstone, white, medium-grained
1422
     1425
              3
                  Siltstone, gray
1425
     1437
             12
                   Shale, dark-gray, fossiliferous
1437 1446
                   Sandstone, white, very fine
              9
1446
                  Siltstone, gray, sandy, 70%; dark-gray shale 30%
      1455
1455
                  Sandstone, light-gray, very fine
      1467
             14
1467
      1486
                  Shale, very dark gray, silty
             19
                  Shale, very dark gray to black, distinctly laminated
1486
      1577
             91
1577 1587
                  Siltstone, light-gray, sandy, also large amount of
             10
                   shale like that above
1587 1600
             15
                  Shale, dark-gray, with some lighter gray siltstone
1600
     1604
             Al Siltstone, gray
1604 1607
                  Sandstone, white to light-brown, very fine, 70%;
              3
                   black shale with a little coal, 30%
1607
      1612
              5
                  Sandstone, brown, fine calcareous
1612
      1617
                  Sandstone, gray, very fine, calcareous
              5
1617
      1623
                  Siltstone, gray, sandy
              6
1623
      1636
             15
                  Sandstone, lightzgray, fine
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```
1636
       1659
              25
                   Sandstone, white, fine, nearly all quarts; some grains
                    have crystal faces
1659
       1685
              26
                   Limestone, gray to brownish, with a few fossils
                   Shale and siltstone, grayish-green
1685
       1692
               7
1692
       1699
               7
                   Shale, red, silty, with limestone nedules, 60%;
                    gray and green shale, 40%
1699
       1705
                   Shale and siltstone, red, with limestone modules
               6
                   Shale, red
1705
       1718
              13
1718
      1730
              12
                   Shale, red, with many small limestone nodules
1730
      1765
              35
                   Shale, red with a little green
1765
      1769
               4
                   Shale, green and red, calcareous
1769
      1774
               5
                   Shale, red
1774
      1779
               5
                   Shale, red, very salty
1779
      1856
              77
                   Shale, red
      1876
1976
1856
              80
                   Siltstone, red, fine
1876
      1886
                   Siltstone, red and green, fine
              10
                   Shale, red and green
1886- 1892
               6
1892
      1928
              36
                   Shale, gray, with fossil shells
1928
      1936
              7
                   Shale, red
1935
      1939
               4
                   Siltstone, light-green
1939
      1950
              11
                   Sandstone, light-gray, very fine
1950
      1955
               5
                   Limestone, gray, partly shaly
1955
      1959
                   Shale, gray, calcareous and fossiliferous
1959
      1964
                   Shale, red, gray, and green limy nodules
               5
1964
<del>1965</del> 1968
                   Shale, red, with red limestone nodules
1968
      1979
             11
                   Siltstone and shale gray
1979
      1985
                   Shale, green and red
               6
1985
      1996
             11
                   Shale, gray and red
1996
      2014
             18
                   Shale, red
2014
      2027
             13
                   Siltatone, red, fine
2027
      2033
                   Sandstone, nearly white, fine 60%; red and green shale 40%
              6
2033
      2048
             15
                   Shale, gray
2048
      2079
                   Shale and siltstone, red
             31
2079
      2086
              7
                  Shale, red and green
2086
      2099
             13
                  Shale, grayish-green, with a little limestone
```

Shale, red and green

```
Shale, gray to dark-gray, silty
2106
      2118
             12
                  Siltstone, light-gray, 60%; dark-gray shale, 40%
2118 2126
             8
2126 2134
              8
                  Shale, red, 60%; gray and green shale and siltstone 40%
                  Shale, dark-gray, 70%; light-gray and green silt-
             13
2134 2147
                   stone, 30%
                  Shale, red and green, silty
2147
      2157
             10
2157
      2166
              9
                  Shale, gray and green
                  Shale, grayish-red
2166 2177
             11
2177
      2185
              8
                  Siltstone, red and gray
                  Shale, grayish-green
2185
     2193
              8
2193 2199
                  Limestone, light-brown; also some shale of various
              6
                   colors
2199 2207
              8
                  Shale and siltstone, dark-gray
2207
             21
                  Sandstone, white with black carbonaceous streaks,
      2228
                   very fine
2228
     2249
             21
                  Sandstone, white, fery fine
2249
     2312
             63
                  Sandstone, White, fine
2312 2323
             11
                  Shale, dark-gray, silty
2323 2339
             16
                  Shale, dark-gray, silty and highly calcareous,
                   fossiliferous
2339 2343
                  Shale, gray, 60%; gray limestone, 40%
2343
     2348
                  Limestone, gray, shaly
              5
2348
     2379
             31
                  Limestone, gray, partly shaly
2379
     2386
              7
                  Shale, grayish-green
                  Shale, gray, 60%; gray limestone, 40%
2386 2398
              ß
            31
                  Shale, gray, fossiliferous
2598
     2423
                  Limestone, brownish gray, fossiliferous
2425
     2436
             13
2436 2438
              2
                  Shale, gray (top and bottom from driller's record)
                       Greenbrier Limestone, 327 feet
2438 2454
             16
                  Limestone, light-brown, fossiliferous
2454 2465
             11
                  Limestone, light-brown, fossiliferous, 60%;
                   gray shale, 40%
2465 2473
              8
                  Limestone, gray, shaly, fossiliferous
2473 2483
             10
                  Limestone, light-brown
2483 2505
             22
                  Limestone, very light brown, colitie; colites are
                   abundant and distinct; also contains micro fessils
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Limestone, brown, with a few colites

2505 2512

7

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2512 2522
                   Limestone, nearly white, colitic
              10
 2522
       2571
              49
                   Limestone, brown to light-brown
 2571
       2583
              12
                   Limestone, gray and brown, slightly sandy; contains
                    many rounded calcite makes
 2583
       2624
              41
                   Limestone, very light brown
                   Limestone, nearly white, colitic
 2624 2634
              10
 2634 2685
              51
                   Limestone, brown to light-brown; indistinct colites,
                    2659 - 26641
 2685 2700
              15
                   Limestone, very light brown, colitic
 2700 2739
                   Limestone, brown to light-brown
              39
 2739
      2749
              10
                   Limestone, nearly white, partly colitic
 2749 2780
              31
                   Limestone, brown
 2780
                   Limestone, brown; contains some silt and very fine sand
      2800
              20
 2800
      2809
               9
                   Limestone, gray, with a few rounded sand grains and a
                    very little brown chert
2809
      2816
                   Limestone, gray, dolomitic, with a few rounded sand
                    grains and about 5% of white anhydrite
2816
      2825
                   Bolomite, gray, silty with about 20% of white anhydrite
2825
      2835
              10
                           MacGrady Formation, 25 feet
2825
      2835
              10
                   Siltstone and shale, light-red
      2850
2835
                   Siltatone, red; a few rounded sand grains, 2835-2843:
             1.5
                           Poseno Formation, 507 feet
                  Siltatone, gray, containing a small amount of white
2850
      2860
             10
                   anhydrite
2860
     2872
             12
                  Shale, gray, very silty
2872
     2890
                  Siltstone, light-gray, very sandy
             18
2890 2926
             36
                  Shale and siltstone, gray
2926 2972
                  Sandstone, light-gray, very fine
             46
2972
      2979
              7
                  Sandstone, light-gray, very fine 70%; gray shale, 30%
2979
      2999
             50
                  Shale, dark-gray, 60%; very fine, light gray sandstone,
                   40%
                  Shale, dark-gray, with thin streaks of light-gray to
2999
      3087
             88
                   light-brown very fine sandstone
                  Shale, gray to dark-gray, mostly silty; small amounts of
3087
      3318
            231
                   siltatone in most samples
3318
      3328
                  Shale, dark-gray
             10
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3328

3338

10

No sample

3338	3350	12	Shale, very dark gray (Sunbury Shale)
3350	3357	7	Siltstone, gray 70%; very dark gray shale, 30%
			Devonian Shales, 1269+ feet
3357	3390	33	Shale and siltstone, gray; depth corrected from
			3390 to 3400' by S L M
3400	3450	50	Shale, gray with some fine siltstone
3450	3554	104	Shale and siltstone, gray
3554	4628		Samples not examined ("slate and shells")
	4626		Total depth of record

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