

Y-21-52  
C

John Timbreck No. 1 Well.

Gere District, Hampshire County, W. Va.

By T. M. Pettigrew, et al, 2010 Massachusetts Avenue, N. W., Washington, D.C.

Located 0.51 mile S. of 39° 20' and 4.36 miles W. of 78° 35'

Hanging Rock Quadrangle - SC

Elevation 1198' L

Permit, Hampshire 2

John Timbrook #1  
T. M. Pettigrew, et. al.

Top	Bottom	Thickness	
0	40	40	Weathered siltstone and shale, olive-gray to moderate and dark yellowish brown; contains large amount of hydrous oxidized
40	62	22	Shale and some siltstone, dark-gray, some grayish-black at the top
62	92	30	Siltstone to sandstone (very fine), medium to medium dark gray; shale, dark-gray
92	105	13	Siltstone to sandstone <sup>(VERY FINE), MEDIUM-TO DARK-GRAY, MOSTLY SANDSTONE</sup> in the middle part; a large amount of dark-gray shale
105	123	18	Shale, dark-gray; some medium dark gray siltstone
123	157	34	Siltstone, medium dark to dark-gray (shaly); small amount is calcareous and dolomitic; some dark-gray to grayish-black shale; trace of white dolomite
157	209	52	Siltstone, medium dark gray to shale, <sup>DARK-GRAY; SMALL</sup> trace of <del>white dolomite</del> <sub>AMOUNT IS DOLOMITIC</sub>
209	230	21	Siltstone, medium dark gray (with greenish cast) closely interbedded with dark-gray shale
230	257	27	Siltstone, medium dark gray to dark greenish gray with grayish-black streaks and white (dolomite) spots; some dark-gray shale
257	267	10	Shale, dark-gray, very silty
267	300	33	Siltstone, medium dark gray (with greenish cast); some grayish-black at 271 to 277; some dark-gray shale at the top; some medium dark to dark-gray shale in the lower part
300	308	8	Shale, grayish-black with white to light-gray dolomite; a large amount of medium dark gray siltstone (with greenish cast)
308	331	23	Siltstone, medium dark gray (with greenish cast); some dark-gray shale
331	380	49	Shale and some siltstone, medium dark to dark-gray; the siltstone has a greenish cast
380	398	18	Siltstone, medium dark gray; a few scattered euhedral glassy quartz crystals
398	405	7	Siltstone, medium dark to dark-gray
405	414	9	Shale, grayish-black to black, silty to shaly siltstone; some dark-gray siltstone in the upper part
414	423	9	Shale, medium dark to dark-gray
423	438	15	Siltstone, medium dark gray; some dark-gray shale
438	485	47	Siltstone and silty shale, medium dark to dark-gray, slightly dolomitic in the upper part, calcareous and dolomitic in part of the lower part
485	495	10	Siltstone, medium dark gray, highly calcareous and dolomitic in part

495	535	40	Shale, dark-gray and siltstone, medium dark gray, with greenish cast
535	575	40	Siltstone, medium dark to dark-gray, shaly
575	654	54	Siltstone, medium dark gray and shale, dark-gray, silty
654	700	46	Shale and siltstone, grayish-black to black; a very large amount of dark-gray shale; small amount of white to light-gray dolomite
700	904	204	Siltstone, medium dark to dark-gray (with greenish cast) and shale, dark-gray, slightly dolomitic; mostly shale at 755 to 771 and 824 to 838
904	984	80	Siltstone and shale, medium dark to dark-gray, slightly dolomitic; some of the samples contain a little white dolomite (vein fillings)
984	1239	255	Siltstone and shale, medium dark to dark-gray, some grayish-black, slightly to moderately dolomitic, some vein dolomite and a little (vein) quartz, mostly medium dark gray siltstone at 1054 to 1055, predominately siltstone from 1090 to 1239
1239	1346	107	Siltstone and shale, medium dark to dark-gray
1346	1490	144	Siltstone, medium dark gray (with greenish cast), small amount is dolomitic; some shale, medium dark to dark-gray
1490	1540	50	Siltstone, medium- to medium dark gray; some medium dark gray shale
1540	1854	314	Siltstone and shale, medium dark to dark-gray, much of the siltstone has a greenish cast, mostly medium dark gray with <del>some</del> from 1540 to 1546, dolomitic in part, mostly shale from 1778 to 1854
1854	1867	13	Shale, grayish-black, medium dark to dark-gray
1867	1888	21	Shale and siltstone, medium dark to dark-gray
1888	1905	17	Shale, and siltstone, medium dark to dark-gray; some grayish-black, dolomitic in part
1905	2042	137	Shale and siltstone, medium dark to dark-gray; some grayish-black at 1919 to 1927 and 1959 to 1968 and at the bottom, small amount is dolomitic
2042	2058	16	Shale, grayish-black to black, carbonaceous with some vein dolomite and quartz; shale and siltstone, medium dark gray (cavings?)
2058	2118	60	Shale and siltstone, medium dark gray
2118	2232	114	Siltstone and shale, medium dark to dark-gray, a large amount of dark-gray to grayish-black at 2127 to 2131 and some at the bottom; small amount of vein dolomite and quartz
2232	2245	13	Siltstone and some shale, medium dark to dark-gray, dolomitic
2245	2255	10	No sample
2255	2818	563	Siltstone and shale, medium dark to dark-gray, some dark-gray to grayish-black at 2332 to 2341 and 2392 to 2409 and at 2791 to 2818; small amount of vein dolomite; dolomitic at the bottom
2818	2836	18	Shale, dark-gray, some grayish-black, calcareous in part

2836	2861	25	Shale, grayish-black to black, some black, carbonaceous, slightly calcareous and dolomitic
2861	2884	23	Shale, grayish-black, some grayish-black to black, pyritic in part, small amount is calcareous
2884	2922	38	Shale, dark-gray to grayish-black, a large amount of grayish-black to black with much vein calcite (bottom of Genesee?)
2922	2950	28	Siltstone, grayish-black, shaly, slightly dolomitic; small amount is highly calcareous
2950	3016	66	Siltstone, medium dark to dark gray, some grayish-black at the top and 2994 to 2998, somewhat calcareous and dolomitic; shale, dark-gray 2981 to 2989
3016	3129	113	Shale and siltstone, dark-gray
3129	3185	56	Shale, dark-gray; trace of calcite
3185	3202	17	Shale, dark-gray; some dark-gray to grayish-black fossiliferous limestone
3202	3231	29	Shale to siltstone, dark-gray; small amount is calcareous and dolomitic
3231	3298	67	Shale, dark-gray to grayish-black
3298	3327	29	Shale to siltstone, medium dark to dark-gray with some calcareous fossil fragments
3327	3371	44	Shale, dark-gray, dolomitic and pyritic in part at 3336 to 3345

- 3371 3391 20 Shale, dark-gray; some olive-black- to grayish-black, oolitic limestone, shaly with a little dark-gray carbonaceous (fossiliferous) shale; very small amount of vein calcite and glassy quartz
- 3391 <sup>3384</sup> ~~4534~~ 1143 Shale to shaly siltstone, darkgray to grayish-black; some calcareous fossil fragments in the upper part; a small amount of vein calcite and quartz at 3588 to 3598 and 3778 to 3787, and 4108 to 4112; some medium-gray siltstone (with greenish cast) at 3728 to 3739; somewhat pyritic from 3797 to 4037; generally darker in the lower part of this interval
- 4534 4835 301 Shale, grayish-black and dark-gray to grayish-black, slightly pyritic; many of the samples contain small amounts of vein calcite and quartz; a large amount of medium dark to dark-gray, very shaly, calcareous siltstone from 4807 to 4835
- 4835 4951 116 Shale, grayish-black, silty, pyritic in the lower part; some white, vein calcite and quartz from 4916 to 4948
- 4951 5112 161 Shale, grayish-black, some grayish-black to black, somewhat pyritic; most of the samples contain small amounts of vein calcite and quartz, a moderate amount at 5072 to 5112; a large amount of grayish-black to black in the lower part
- 5112 5322 210 Shale, grayish-black and grayish-black to black, some of the samples contain a little vein calcite, dolomite and quartz (moderate amount at 5292 -98), somewhat pyritic in part
- 5322 5518 196 Shale, grayish-black to black, pyritic; some white, vein calcite from 5444 to bottom
- 5518 5608 90 Shale, dark-gray to grayish-black, highly calcareous with a little vein calcite; small amount is highly pyritic; some black, carbonaceous shale
- 5608 5652 44 Shale, grayish-black, highly calcareous, slightly pyritic
- 5652 5665 13 Shale (very highly calcareous) and some limestone (very shaly), dark-gray to grayish-black
- 5665 5692 27 Shale, grayish-black, highly calcareous, dolomitic in part
- 5692 <sup>5770</sup> ~~5785~~ <sup>278</sup> 33 Shale, grayish-black (calcareous) to black (carbonaceous), dolomitic in part, pyritic

5970	6005	35	No Sample
6005	6018	13	Shale, black, some grayish-black to black, highly carbonaceous; much of the sample is slickensided in the lower part, pyritic in part; a moderate amount of white vein calcite
6018	6306	288	Shale, black and grayish-black to black, carbonaceous, somewhat pyritic, calcareous in part; small amount of vein calcite; a small amount of dark-gray to brownish-black limestone at the bottom
<u>Needmore Shale, 622, plus, feet.</u>			
6306	6318	7	Shale, black and grayish-black to black, carbonaceous, calcareous; some brownish-black to grayish-black, pyritized, metabentonite; a very small amount of vein calcite
6313	6338	25	Shale, grayish-black to black, highly calcareous, a moderate to large amount of vein (white) calcite, pyritic in part; a moderate to large amount of brownish-gray to brownish-black metabentonite, pyritic in part; small amount of dark-gray to brownish-black limestone in the lower part
6338	6449	111	Shale, grayish-black to black and black, carbonaceous, calcareous with moderate to large amounts of white calcite; a large amount of brownish-gray to brownish-black and dusky yellowish brown metabentonite, highly pyritic in part; small amount of white calcite; slickensided and pyritic in the bottom few samples
6449	6507	58	Shale, grayish-black to black, carbonaceous, calcareous in part, pyritic; small amount of brownish-gray to grayish-black, pyritic metabentonite
6507	6783	276	Shale, grayish-black; some grayish-black to black, somewhat carbonaceous, calcareous in part, slightly pyritic; some samples are moderately pyritic; many of the samples contain vein calcite
6783	6786	3	Shale, grayish-black, some grayish-black to black; a moderate amount of vein calcite; a very small amount of brownish-gray metabentonite
6786	6790	4	Shale, grayish-black, some grayish-black to black, highly calcareous with a very large amount of white vein calcite; small amount of brownish-gray metabentonite; many of the outtings show slickensides
6790	6815	25	Shale, grayish-black, grayish-black to black (carbonaceous), some vein calcite, pyritic in part
6815	6821	6	Shale, grayish-black, very highly calcareous with some shaly limestone and some vein calcite; some of the pieces are slickensided; a very small amount of metabentonite
6821	6823	2	Shale, grayish-black, very highly calcareous, some grayish-black to black, pyritic in part; some metabentonite
6823	6825	2	No sample
6825	6830	5	Shale, mostly grayish-black, very highly calcareous with some limestone and white calcite, pyritic in part; trace of metabentonite
6830	6834	4	Shale, grayish-black to black, highly calcareous in part; some calcite; small amount of metabentonite

- 6834 6839 5 Shale, grayish-black to black with some white calcite and some chert; a large amount of brownish-gray to grayish-black metabentonite
- 6839 6847 8 Shale, grayish-black to black, highly calcareous with some shaly limestone; some calcite; some metabentonite
- 6847 6882 35 Shale, grayish-black, highly calcareous with some shaly limestone; a moderate to large amount of white vein calcite; a very small amount of metabentonite (avings)?; a small amount of chert
- 6882 6902 20 Shale, grayish-black, highly calcareous to a very shaly limestone; some white vein calcite; small amount of metabentonite; a very small amount of chert
- 6902 6920 18 Shale, grayish-black, highly calcareous with some shaly limestone, pyritic; moderate amount of vein calcite and some chert; some metabentonite
- 6920 6928 8 Shale, grayish-black to black; a large amount of black (highly carbonaceous) in the lower part, highly calcareous and some metabentonite at the top; a little calcite

- 6928 6949 21 Shale, grayish-black to black, carbonaceous, highly calcareous in part, many pieces are slickensided, slightly pyritic; some white calcite; a very small amount of meta-bentonite
- 6949 7020 71 Shale, dark-gray, to grayish-black, highly calcareous, in the upper part to somewhat calcareous in the middle part, somewhat dolomitic, non calcareous and nondolomitic in the lower part
- 7020 7028 8 Shale, dark-gray to grayish-black, some grayish-black to black
- 7028 7031 3 Shale, grayish-black and grayish-black to black; small amount is calcareous
- 7031 7055 24 Shale, dark-gray to grayish-black, highly calcareous in the upper part, somewhat calcareous in the middle and lower parts; a large amount of grayish-black to black shale at the top and bottom
- 7055 7062 7 Shale, grayish-black, some grayish-black to black, a large amount of vein calcite and quartz
- 7062 7080 18 Shale, dark-gray to grayish-black, slightly calcareous
- 7080 7088 8 Shale, dark-gray and grayish-black to black; a moderate amount of white vein calcite and quartz; small amount of pyrite
- 7088 7115 27 Shale, grayish-black to black (carbonaceous), some black (highly carbonaceous), pyritic, slightly calcareous
- 7115 7125 10 ~~CRISKANY SANDSTONE 57 FEET~~  
Sandstone, light- to medium-gray, fine-grained, some medium grains, some dark argillaceous material, somewhat calcareous
- 7125 7130 5 Sandstone, light-gray, fine- to medium-grained, subrounded to rounded, somewhat calcareous
- 7130 7135 5 Sandstone, light-gray, fine-grained, some medium grains, calcareous
- 7135 7144 9 Sandstone, light- to medium-gray, very fine to medium-grained, highly calcareous to a sandy limestone, some dark (shaly) material
- 7144 7149 5 Sandstone, medium light-gray, very fine to medium-grained, some coarse grains, subrounded to rounded, quartzitic in part, calcareous
- 7149 7153 4 Sandstone, very light to light-gray, fine to medium-grained, quartzitic, calcareous
- 7153 7157 4 As above but less calcareous and some shaly (interstitial) material
- 7157 7162 5 Quartzite, very light gray, fine grained, some shaly material (interstitial)
- 7162 7166 4 Sandstone, very light gray to light-gray, very fine to medium grained, quartzitic to a quartzite, slightly calcareous
- 7166 Limestone, brownish-black, argillaceous, dolomitic