

J. Bennett Porter No. 1 Well

Grant District, Hancock County, W. Va.

By R. J. Braden Co., Marietta, Ohio.

Located 4.9 mi. S. of 40°40' and 3.0 mi. W. of 80°35' -C- Wellsville quadrangle;
1 mi. S. E. of Central part of Wellsville.

Elevation, 1122'.

Permit, Han-22, drilled in 1939.

Samples from 110 to 1135' examined by J. H. C. Martens. The samples apparently
start near the top of the Allegheny.

Top	Bottom	Thickness	
<u>Allegheny and Pottsville, 655 feet</u>			
110	120	10	Limestone, gray, clayey, 50%; gray silty shale, 50% (Upper Freeport Limestone?)
120	130	10	Siltstone, gray with very abundant siderite spherulites
130	140	10	Sandstone, light-gray, fine
140	150	10	Sandstone, dark-gray, very fine, shaly; contains considerable mica and carbonaceous matter
150	170	20	Siltstone, dark-gray, shaly
170	190	20	Shale, dark-gray
190	200	10	Clay, gray, 60%; green silty shale with many siderite spherulites, 20%; the rest limestone and red and black shale
200	210	10	Shale, green, silty, with siderite spherulites
210	220	10	Shale, red, 50%; gray and green shale, 50%
220	230	10	Shale, red, 60%; gray and green shale, 40%
230	240	10	Limestone, light-brown to gray, very fine textured, pyritic
240	250	10	Shale, light-gray, soft
250	260	10	Shale, dark-gray, soft, 80%; light-gray siltstone, 20%
260	270	10	Siltstone, dark-gray, shaly, micaceous
270	290	20	Sandstone, light-gray, fine; contains some mica, chlorite and kaolin
290	300	10	Sandstone, nearly white, medium-grained
300	310	10	Siltstone, gray, shaly, with abundant siderite spherulites
310	320	10	Shale, dark- and light-gray with a little coal
320	330	10	Shale, gray, soft, highly calcareous

Top	Bottom	Thickness	
330	345	15	Siltstone, dark-gray, shaly
345	360	15	Shale and siltstone, gray, partly calcareous; many siderite spherulites in the siltstone
360	370	10	Siltstone, dark-gray
370	380	10	Sandstone, gray, fine
380	430	50	Sandstone, white, medium-grained
430	440	10	Sandstone, white, coarse
440	450	10	Sandstone, white, coarse, 50%; gray shaly, micaceous siltstone 50%
450	470	20	Siltstone, dark-gray, shaly, micaceous
470	500	30	Siltstone, greenish-gray, shaly, calcareous; contains much siderite, partly in spherulites
500	550	50	Shale and siltstone, dark-gray, micaceous; some ferruginous limestone from 530 to 540'
550	590	40	Siltstone, gray, with much siderite
590	600	10	Shale, gray, silty
600	640	40	Shale, dark-gray
640	650	10	Sandstone, gray, very fine
650	660	10	Shale and siltstone, dark-gray to black
660	670	10	Shale, light-gray with siderite spherulites
670	680	10	Siltstone, dark-gray, shaly
680	690	10	Siltstone, dark-gray, shaly, 60%; light-gray fine sandstone, 40%
690	700	10	Shale, black, 70%; gray siltstone and fine sandstone, 30%
700	710	10	Shale, black and gray, with small amount of coal
710	730	20	Shale, dark-gray to black, silty, 70%; light-gray to brownish silty shale, 30%
730	740	10	Siltstone, black; small amount of white, fine sandstone
740	750	10	Siltstone and shale; about half light-gray and half dark-gray to black; siderite spherulites in light part, small amount of coal
750	765	15	Sandstone, white, very coarse, 50%; gray shale and siltstone, 50%
<u>Pogono Formation, 349 feet</u>			
765	825	60	Shale and siltstone, gray; some fine white sandstone, 790 to 795'
825	845	20	Shale, gray, silty

Top	Bottom	Thickness	
845	855	10	Sandstone, gray, very fine, calcareous
855	865	10	Sandstone, gray, very fine, shaly, 70%; gray shale and siltstone, 30%
865	870	5	Shale, dark-gray
870	885	15	Sandstone, gray, very fine, shaly, 70%; gray shale and siltstone, 30%
885	895	10	Shale and siltstone, gray, micaceous
895	935	40	Siltstone and very fine sandstone, gray; mostly shaly in structure, but little of it is fine enough for true shale
935	950	15	Shale and siltstone, gray
950	970	20	Sandstone, gray, very fine, shaly; much of it could just as well be called siltstone
970	1040	70	Siltstone, gray with up to 30% of darker gray shale; some fragments probably coarse enough to be sandstone rather than siltstone
1040	1067	27	Shale, dark-gray (Sumbury Shale)
1067	1077	10	Sandstone, very light-gray, fine, slightly calcareous (Berea Sandstone, 1067 to 1114')
1077	1090	13	Sandstone, light-gray, very fine, slightly calcareous; some darker shaly, micaceous material
1090	1114	24	Sandstone, light-gray, fine to very fine, slightly calcareous
			<u>Devonian or Mississippian shale, 19+ feet</u>
1114	1133	19	Shale and siltstone, gray
	1133		Total depth shown by samples