

INTERVAL LITHOLOGY

MISSISSIPPIAN

Price = Borden (KY), Grainger (TN), Pocono (WVA)

- 4000 - 4056 Shale, dark gray, silty; 12% interbedded siltstone, medium gray, argillaceous.
- 4056 - 70 Shale, dark gray, silty; streaks of siltstone, medium gray, argillaceous.
- 4070 - 90 Missing
- 4090 - 4153 Shale, dark gray, silty; streaks of siltstone, medium gray, argillaceous.

Big Stone Gap = Sunbury (KY, OH, WVA), Chattanooga (TN)

- 4153 - 73 Shale, black, silty.
- 4173 - 76 Shale, medium gray, silty, pyritic.

Berea

- 4176 - 90 Sandstone, Brownish gray, very fine grained, subangular, fairly cemented, silty, argillaceous.
- 4190 - 4200 Sandstone, white to light gray, very fine grained, fairly to well cemented, argillaceous.
- 4200 - 10 Missing
- 4210 - 40 Sandstone, brownish gray, very fine grained, subangular, fairly cemented, argillaceous, and partly dolomitic; interbedded shale, slightly medium gray, silty.
- 4240 - 80 Missing

Devonian Brallier?

- 4280 - 90 Shale, grayish black, slightly silty.
- 4290 - 4300 Missing
- 4300 - 4370 Shale, medium gray, silty, pyritic; 30% interbedded sandstone, light gray, very fine grained to silty, argillaceous; 30% interbedded siltstone, medium gray, sandy, argillaceous; 10% interbedded shale, grayish black, silty.
- 4380 - 90 Shale, siltstone and sandstone, as above; pyrite.
- 4390 - 4410 Missing.

<u>INTERVAL</u>	<u>LITHOLOGY</u>
4470 - 80	Missing
4480 - 4510	Shale, medium gray, silty; 20% sandstone, as above; 20% siltstone, as above; 10% shale, grayish black; pyrite.
4510 - 20	Missing
4520 - 4623	Shale, medium gray, silty; 30% siltstone, medium gray, sandy, argillaceous; 10% interbedded shale, grayish black, silty; trace of pyrite at 4618'.
4623 - 4767	Shale, medium gray, silty; 25% sandstone, light gray, very fine grained to silty, argillaceous; 25% interbedded siltstone, medium gray, sandy, argillaceous; 15% interbedded shale grayish black, silty; pyrite.
4767 - 4880	Shale, medium gray, silty; 25% siltstone, medium gray, sandy, argillaceous; 25% shale, grayish black to black, silty; trace of brachiopod at 4805'.
4880 - 90	Missing
4890 - 4928	Shale, medium gray, silty; 5% interbedded siltstone, medium gray, argillaceous; 15% shale, grayish black, silty.
4928 - 60	Shale, medium gray, silty; 50% shale, black, silty, pyritic.
4960 - 70	Missing
4970 - 5030	Shale, medium gray, silty, pyritic; 15% interbedded shale, black, silty.

Millboro

5030 - 50	Shale, black, silty, pyritic; 30% shale, medium gray, silty.
5050 - 60	Missing
5060 - 90	Shale, black, silty, pyritic; 30% shale, medium gray, silty.
5090 - 5150	Missing
5150 - 5200	Shale, medium gray, silty; pyritic; 30% shale, medium gray, silty; 10% interbedded siltstone, medium gray, argillaceous.
5200 - 83	Shale, grayish black, silty; 10% interbedded shale, medium gray, silty; pyrite.
5283 - 5340	Shale, grayish black, silty; 40% interbedded shale, medium gray, silty, pyritic.
5340 - 41	Metabentonite, light gray, non-micaceous.

INTERVALLITHOLOGYNeedmore

- 5341 - 5409 Shale, medium gray to greenish gray, slightly silty, slightly and partly calcareous, pyritic.
- 5409 - 10 Metabentonite, white to light gray, micaceous.
- 5410 - 30 Shale, as above.
- 5430 - 40 Missing
- 5440 - 5509 Shale, as above; trace of white to light gray, micaceous, metabentonite at 5452' and 5490'.
- 5509 - 10 Metabentonite, as above.
- 5510 - 20 Shale, as above.
- 5520 - 21 Shale, as above.

Beaver Dam

- 5521 - 60 Shale, grayish black, slightly silty, micaceous, pyritic, non-calcareous; spores.
- 5560 - 5610 Missing
- 5610 - 19 Shale, brownish black, silty, highly calcareous, pyritic; spores.
- 5619 - 20 Metabentonite, light gray, micaceous.