

By Hope Natural Gas Co., Clarksburg, W. Va.
Walker District, Wood County, W. Va.
Located 5.45 mi. S. of 39° 20' Lat. and 1.15 mi. W. of 80° 15' Long.
Marietta Quadrangle - SE.
Permit Wood-351.
Elevation 1039' L.
Drilling commenced May, 1951; commenced drilling with rotary tools July, 1953.

11/14/55
Wood 351

ORISKANY SANDSTONE, 190, plus, Feet.

Top	Bottom	Thickness	
4338	4347	9	Sandstone, medium to dark gray, very fine to fine grained with some medium grains, large grains rounded, contains much black interstitial material, calcareous in part
4347	4360	13	Sandstone, light to medium gray, fine grained, somewhat calcareous, some medium grains
4360	4380	20	Sandstone, light to medium gray, some dark gray, very fine to fine grained, some medium grains, fine to medium grained in part (with some coarse grains), somewhat calcareous, contains dark gray interstitial material; small amount of chert
4380	4402	22	Sandstone, medium gray, very fine grained, some fine grains, very fine to fine grained in part, contains dark and shaly streak, calcareous; trace of chert at the top
4402	4425	23	Sandstone, light to medium gray, fine to medium grained, some very fine grains, contains dark gray argillaceous streak, somewhat calcareous
4425	4465	40	Sandstone, light to medium gray, some dark gray to grayish black in the lower part, very fine to fine grained, argillaceous, a few of the samples contain a trace of chert, somewhat calcareous
4465	4485	20	Sandstone, medium to dark gray, contains black interstitial material, very fine to fine grained, argillaceous, slightly to moderately calcareous, contains some medium (rounded) grains
4485	4497	12	Sandstone, dark gray to grayish black, much black interstitial material, very fine to fine grained, somewhat calcareous
4497	4528	31	Sandstone, medium gray to brownish gray with dark gray to grayish black shaly streak, calcareous, very fine to fine grained with some medium grains; some dark gray, highly glauconitic, sandy siltstone at the bottom
BRECCIATED LIMESTONE TO CHERT (Huntersville?) 917 Feet (Many of the samples from 4528 to 4640 contain vein quartz and calcite with occasional sandstone (caved?))			
4528	4625	97	Chert, light gray (translucent) to medium gray and brownish gray (porcelaneous), much of the chert is brecciated, highly calcareous, somewhat dolomitic, very highly calcareous and dolomitic from 4555-4625, many of the samples contain dark grayish black (argillaceous) streak; some medium to dark gray, highly calcareous, somewhat glauconitic siltstone from 4600-4615

- 4685 4680 55 Chert (calcareous) to limestone (very cherty), light to medium gray and brownish gray, some dark gray to brownish black, somewhat dolomitic, slightly glauconitic
- 4680 4722 42 Limestone (light brownish gray to brownish gray, cherty), to chert (highly calcareous, light to medium gray and brownish gray), dolomitic
- 4722 4755 33 Chert (light to medium gray, translucent, some dark gray, calcareous) to limestone (light brownish gray to brownish gray, some brownish black to dark gray, very cherty), somewhat dolomitic, contains a few shaly streaks
- 4755 4767 12 Chert, brownish gray to brownish black, very highly calcareous, argillaceous; some light gray calcareous shale ^{Chert}
- 4767 4840 73 Chert to limestone, light gray ^{And} to light brownish gray ^{to med.} and brownish gray, some dark gray to brownish black (argillaceous), somewhat dolomitic
- 4840 4845 5 Sandstone, light to medium gray and brownish gray, very fine to fine grained, calcareous; a very large amount of chert to limestone (very cherty), light gray to brownish gray and brownish black; some vein quartz and calcite
- 4845 4865 20 Chert to limestone (cherty), light to medium gray and brownish gray, somewhat dolomitic; some sandstone, light gray to brownish gray and some dark gray, very fine to fine grained, calcareous; some vein calcite
- 4865 4875 10 A mixture of chert to limestone, brownish gray to medium gray; sandstone, light gray to medium gray and brownish gray, very fine to fine grained with some vein quartz and calcite
- 4875 4885 10 Chert (highly calcareous) to limestone (very cherty), medium light to medium dark gray and brownish gray, some brownish black, contains some clear calcite; a very small amount of light to medium gray sandstone
- 4885 4940 55 Chert, medium light to medium dark gray, highly calcareous to a brownish gray to brownish black, cherty limestone, dolomitic in upper part, somewhat dolomitic in the lower part; contains small amount of light to dark gray very fine to fine grained sandstone and clear calcite; some grayish black to black, argillaceous material (shaly streak) from 4885 to 4940-4930
4875
- 4940 4960 20 Shale (silicified) to chert (highly argillaceous), medium gray to brownish gray and dark gray to brownish black, some grayish black, highly calcareous, dolomitic to highly dolomitic, somewhat glauconitic at the top to highly glauconitic at the bottom; contains a little clear calcite
- 4960 4985 25 Shale, dark gray, highly calcareous, dolomitic, cherty, glauconitic
- 4985 5025 40 Chert to limestone, light gray to brownish gray, some brownish black to dark gray and grayish black (shaly); occasional gray sandstone fragment in the lower part
- 5025 5042 17 Chert (translucent to opaque) light to medium gray, some dark gray (argillaceous), calcareous to a limestone, brownish gray with some brownish black, argillaceous; small amount of clear calcite
- 5042 5065 23 Chert, very light to light gray, mostly translucent, somewhat calcareous; limestone, brownish gray with some brownish black (argillaceous), cherty (lacy)
- 5065 5105 40 Chert (light to medium gray, translucent with some dark gray to brownish black (argillaceous), calcareous to limestone (brownish gray with brownish black (argillaceous) spots and streaks, cherty

- 5105 5135 30 Chert (light to medium gray, translucent, small amount of dark gray to brownish black (argillaceous), calcareous; a large amount of brownish gray, very cherty limestone with brownish black (argillaceous) streak; trace of light gray sandstone in the lower part
- 5135 5225 90 Chert (very light to medium gray, translucent) to limestone light brownish gray to brownish gray, very cherty (lacy); small amount of brownish black to dark gray, argillaceous limestone to chert in the upper part and some in the lower part
- 5225 5245 20 Chert to limestone, light gray to light brownish gray and brownish gray, some brownish black to grayish black (argillaceous); a large amount of dark gray to brownish black and ~~and~~ grayish black, argillaceous limestone and chert in the upper part
- 5245 5260 15 ✓ Chert [white to light gray, translucent to transparent, medium gray to grayish black (argillaceous), calcareous] to limestone [light brownish gray to brownish gray, cherty (lacy)]
- 5260 5275 15 ✓ Chert, light to medium gray mottled with dark gray to grayish black (argillaceous), silty to a silicified, dolomitic siltstone, highly calcareous to cherty, brownish gray to brownish black limestone
- 5275 5285 10 Chert, light to medium gray and brownish gray mottled with dark gray to grayish black (argillaceous), very highly calcareous, silty in part
- 5285 5320 35 ✓ Chert, ^{very} light to light gray (translucent) mottled with some dark gray to grayish black (argillaceous), highly calcareous to a light brownish gray to brownish gray and some brownish black, silty, dolomitic limestone
- 5320 5340 20 Chert, medium light to medium dark gray, small amount of brownish black (argillaceous), highly calcareous to a somewhat dolomitic and silty, brownish gray limestone
- 5340 5370 30 Chert, medium light to medium dark gray (translucent) and brownish black (argillaceous), very highly calcareous, silty, dolomitic
- 5370 5415 45 Chert, ^{highly calcareous to brownish gray to brownish black cherty} medium light to medium dark gray, dark gray to brownish black, cherty limestone; some medium gray to medium dark gray and brownish gray, dolomitic, calcareous ~~gray~~ siltstone from 5390 to 5405 *glauconitic*
- 5415 5445 30 Chert, medium light gray to medium gray, some light gray in the lower part, highly calcareous to a brownish gray to brownish black, cherty limestone; some medium gray to brownish gray, highly calcareous, dolomitic siltstone at the bottom

ORISKANY SANDSTONE, 170 Feet

- 5445 5450 5 Sandstone, light to medium gray, fine to medium grained, subrounded to rounded, very fine to fine grained in part, highly calcareous; some dark greenish gray sandstone to dark gray calcareous shale, highly glauconitic; some brownish gray to brownish black limestone (cherty) to dark gray chert
- 5450 5460 10 A mixture of limestone (brownish gray to brownish black) to chert, medium to dark gray, some brownish black (argillaceous) sandstone (light to medium gray, fine grained) to sandstone ~~is~~ only a small part of samples 15

- 5460 5470 10 Sandstone, light to medium gray, some dark gray with black streaks, fine grained, some medium grains, calcareous; some light to medium gray and brownish gray chert to brownish gray and brownish black, cherty limestone
 - 5470 5475 5 Sandstone, dark gray to grayish black with some dark streaks (carbonaceous or organic material), fine grained, fine to medium grained in part
 - 5475 5505 30 Sandstone, light gray, some dark gray to grayish black in the lower part, very fine to fine grained with some medium (rounded) grains, fine to medium grained in the lower part, calcareous
 - 5505 5530 25 Sandstone, light gray, fine to medium grained with very fine grained matrix, large grains rounded
 - 5530 5545 15 Sandstone, light to medium grained, very fine to medium grained, some coarse grains, subrounded to rounded, medium to coarse grained at the top, somewhat calcareous
 - 5545 5555 10 Sandstone, light to medium gray, very fine to medium grained, large grains rounded, calcareous, some dark shaly streaks
 - 5555 5565 10 Sandstone, medium to medium dark gray with dark gray to grayish black shaly streak, somewhat calcareous, very fine to fine grained, ~~intermediate to coarse grained, some medium grains~~ (rounded)
 - 5565 5575 10 Sandstone, medium gray with dark gray to grayish black (shaly) streak, very fine grained, calcareous, highly calcareous in part, contains some fine grains in the upper part, slightly dolomitic
- HELDERBERG, 45 Feet.
- 5575 5600 25 Sandstone (calcareous, very fine grained) to Limestone (very sandy), dark gray to grayish black with white to medium gray spots and streaks, argillaceous and silty with shale streaks, somewhat cherty, somewhat dolomitic
 - 5600 5620 20 Limestone, dark gray to grayish black with white to medium gray streak, very sandy (very fine grained), very silty, argillaceous with many shale streaks, silicified to calcareous chert (in part) Brecciated limestone to chert, 245 feet.
 - 5620 5625 5 Sandstone, light to medium gray, very fine to fine grained, some fine to medium grained, quartzitic, calcareous; chert very light to medium gray, some dark gray (highly argillaceous), highly calcareous, somewhat dolomitic
 - 5625 5630 5 Limestone, medium light to medium dark gray, with dark gray to grayish black (shaly) streak, argillaceous, somewhat silty, cherty
 - 5630 5645 15 Limestone to chert, light to medium gray and brownish gray, mottled with dark gray to grayish brown and brownish black, argillaceous, silty in part
 - 5645 5693 48 Chert, milky (transparent) to light gray and medium gray translucent, some brownish gray to brownish black (argillaceous), calcareous to cherty (lacy), light brownish gray to brownish gray and some brownish black limestone (this group of samples is from a brecciated zone and are very ~~similar~~ similar to those from 4528 to 5415
 - 5693 5705 12 Chert to limestone, light gray to brownish gray and medium gray to brownish gray with some brownish black (shaly) streaks, dolomitic, somewhat silty

- 5705 5785 80 Chert (light to medium gray, translucent) to limestone (lacy), light brownish gray to brownish gray, dolomitic, silty; some brownish black, argillaceous limestone to chert, somewhat dolomitic in the lower part
- 5785 5797 12 Chert (calcareous, somewhat dolomitic) to a cherty, silty dolomitic limestone, light to medium gray and brownish gray, some light brownish gray, some brownish black (argillaceous)
- 5797 5812 15 Limestone, light brownish gray to brownish gray, dolomitic and silty in part, cherty (lacy) to light to medium dark gray, calcareous chert; some brownish black, argillaceous limestone to chert
- 5812 5830 18 Chert to limestone, light and light brownish gray to medium dark gray and brownish gray, some brownish black to grayish black (argillaceous), silty; some medium dark gray to brownish gray, dolomitic glauconitic siltstone with some brownish detrital grains (Collophane?)
- 5830 5865 35 Limestone (silty, dolomitic, very cherty) to shale (calcareous, dolomitic), light brownish gray to brownish gray and medium dark gray, small amount of brownish black (argillaceous)

ORISKANY SANDSTONE, 71 Feet.

- 5865 5900 35 Sandstone, white to very light gray, fine grained with many medium grains, fine to medium grained in part at the bottom, calcareous
- 5900 5925 25 Sandstone, light to medium gray, with some dark gray to grayish black (shaly) streaks, very fine to fine grained, some medium grains, somewhat calcareous; some medium grained, somewhat calcareous; some white to very light gray, fine to coarse grained sandstone
- 5925 5936 11 Sandstone, light to medium gray (top) to medium to medium dark gray (bottom), with dark gray to grayish black (argillaceous) streak, very fine grained, somewhat calcareous

HELDERBERG, 169 Feet.

- 5936 5950 14 Siltstone to sandstone (very fine grained), mottled light to medium gray and dark gray to grayish black, highly calcareous, slightly dolomitic, somewhat cherty, argillaceous with shale streak, small amount of fine to medium sand
- 5950 5960 10 Limestone, light to medium gray (with brownish cast), some grayish black to brownish black (argillaceous), sandy (very fine grained) very silty, cherty
- 5960 5980 20 Limestone (very cherty) in the upper part to chert (very highly calcareous) in the lower part, light gray to brownish gray to medium gray and brownish gray, some dark gray to brownish black (highly argillaceous), dolomitic, very silty and sandy (very fine) in the upper part
- 5980 6000 20 Shale, brownish black to grayish black, some brownish gray to medium gray, very highly calcareous, dolomitic in part, cherty in the upper part
- 6000 6030 30 Shale to chert, dark gray to grayish black, some brownish gray to medium gray, highly calcareous, silty in part, somewhat dolomitic in the lower part
- 6030 6058 28 Chert, light to medium gray, calcareous with much light gray, calcareous siltstone in the middle and lower part; a moderate amount of dark gray and brownish gray to grayish black, argillaceous, dolomitic, silty to cherty limestone
- 6058 6090 32 Siltstone and some shale, brownish black to grayish black and light gray to brownish gray, silicified to a silty chert, highly calcareous, dolomitic

- 6090 6105 15 Limestone, light to medium gray mottled with dark gray to grayish black (argillaceous), silty with some very fine sand, fossiliferous, pyritic in part, finely crystalline
- CAYUGAN (includes Lockport), 1110 Feet
- 6105 6117 12 Limestone, dark gray to brownish black and grayish black, some medium gray to brownish gray, argillaceous, dolomitic
- 6117 6150 33 Limestone, brownish gray to dark gray, some brownish black to grayish black (argillaceous), highly dolomitic, the limestone, is finely crystalline and the dolomite extra fine to very finely crystalline
- 6150 6175 25 Dolomite, light brownish gray to brownish gray, some brownish black, moderately to highly calcareous, somewhat argillaceous
- 6175 6187 12 Shale, dark gray, dolomitic, somewhat calcareous; some brownish gray to brownish black, argillaceous dolomite
- 6187 6217 30 Sandstone, light brownish gray to very light gray, very fine to fine grained, subrounded to rounded, very highly calcareous and highly dolomitic in the upper part to calcareous and dolomitic in the lower part
- 6217 6248 31 Dolomite, dark gray to dusky yellowish brown to brownish black, anhydrous to highly anhydrous, somewhat calcareous, moderately argillaceous
- 6248 6275 27 Dolomite, dusky yellowish brown to brownish black, some brownish black to black (carbonaceous), argillaceous with some shale streaks, anhydrous
- 6275 6310 35 Dolomite-anhydrite rock, dark yellowish brown to dusky yellowish brown, some dark yellowish brown to brownish black, dark yellowish brown in the lower part, somewhat to moderately argillaceous, highly argillaceous at 6285-90 and 6295-6300
- 6310 6325 15 Dolomite, dark yellowish brown to brownish black, moderately argillaceous, anhydrous at the top, somewhat anhydrous at the bottom; some dark gray, dolomitic shale in the middle and lower part
- 6325 6355 30 Dolomite, dark yellowish brown to brownish black, some brownish black to black (carbonaceous, shaly) streaks, moderately argillaceous, somewhat anhydrous
- 6355 6447 92 Dolomite-anhydrite rock, medium dark gray and dark gray to brownish black and grayish black, somewhat argillaceous, some light gray to clear anhydrite; a moderate to large amount of dark gray to dusky yellowish brown, moderately argillaceous, anhydrite-dolomite in the lower part
- 6447 6475 28 Dolomite, dark to dusky yellowish brown, dark yellowish brown at the top, moderately argillaceous, moderately to highly anhydritic
- 6475 6520 45 Dolomite, dark yellowish brown to brownish black, moderately argillaceous, somewhat to moderately anhydritic
- 6520 6545 25 Dolomite, dark yellowish brown to brownish black, some brownish black to black (shaly, carbonaceous), moderately to highly argillaceous, somewhat to moderately anhydritic
- 6545 6585 40 Dolomite, dark yellowish brown to brownish black, some brownish gray, moderately argillaceous, somewhat to moderately anhydritic
- 6585 6720 35 Dolomite, dark gray to dusky yellowish brown to brownish black, somewhat to moderately argillaceous, slightly to somewhat anhydritic, moderately anhydritic at 6640-6645, much medium dark gray to brownish gray at 6645 to 6655 and 6670 to 6685

- W00-351
- 6720 6760 40 Dolomite, dark yellowish brown to dusky yellowish brown and brownish gray to brownish black, some brownish black to black (argillaceous, carbonaceous), moderately to highly anhydrous, somewhat argillaceous
- 6760 6775 15 Dolomite, brownish gray to dark yellowish brown and brownish black, somewhat to moderately anhydrous, somewhat to ~~medium~~ ^{highly} argillaceous
- 6775 6790 15 ✓ Dolomite, dark yellowish brown to brownish gray and dark brownish black, some brownish black, ^{to black} (shaly, carbonaceous), somewhat argillaceous, somewhat shaly in the lower part, moderately to highly anhydritic
- 6790 6820 30 Dolomite, brownish black, some brownish gray to dark yellowish brown, some brownish black to black, moderately argillaceous, somewhat shaly, somewhat to moderately anhydritic, silty and shaly at the bottom
- 6820 6840 20 Shale, medium dark gray, some medium dark gray to greenish gray, dolomitic, silty in part with some highly dolomitic siltstone, somewhat sandy in part; small amount of white to very light gray, very fine to very fine grained sandstone, quartzose, ~~light gray~~, rounded; some brownish gray and olive gray to medium dark gray, argillaceous dolomite; a large amount of dark yellowish brown, somewhat argillaceous, anhydritic dolomite
- 6840 6870 30 Shale and some siltstone, dolomitic to very highly argillaceous and silty dolomite, olive gray to medium dark gray, some medium dark gray to greenish gray, small amount of light olive gray, somewhat sandy (fine) in the upper part, somewhat anhydritic in the lower part; some brownish black to grayish black, argillaceous dolomite
- 6870 6880 10 Some sandstone, white to yellowish gray, fine grained, well rounded, dolomitic; dolomite to shale, olive gray to medium dark gray; small amount of anhydrite; ~~some~~ ^{some} dusky yellowish brown to brownish black, argillaceous, somewhat anhydritic dolomite
- 6880 6900 20 Dolomite, brownish gray to brownish black, argillaceous, somewhat anhydritic; some olive gray to medium dark gray, argillaceous dolomite to dolomitic shale; a large amount of brownish gray to olive gray dolomite at 6890-95
- 6900 6910 10 Dolomite, brownish black, some brownish gray, moderately to highly anhydritic, somewhat to slightly argillaceous; some brownish gray dolomite
- 6910 6920 10 Dolomite, brownish black, some brownish gray, somewhat to moderately argillaceous, somewhat anhydritic; some brownish black, dolomitic shale
- 6920 6945 25 Dolomite, brownish black to grayish black and black, argillaceous to highly dolomitic shale, slightly to somewhat anhydritic
- 6945 6957 12 Dolomite, dark gray to brownish black, ~~some brownish black~~, some brownish gray, moderately argillaceous with some dolomitic shale, somewhat anhydritic
- 6957 6970 13 Dolomite, brownish gray and brownish black in the upper part to brownish black to black in the lower part, somewhat to moderately argillaceous with some dolomitic shale, slightly to somewhat anhydritic, finely crystalline
- 6957 ~~6975~~ 13
- 6970 6982 12 ✓ Dolomite, brownish black to grayish black, somewhat to moderately argillaceous with a moderate amount of dolomitic shale, slightly anhydritic, the non-shaly dolomite is finely crystalline

- 6982 7015 33 ✓ Dolomite, brownish black (dolomitized former oolites, brownish black to black oolites with light gray matrix), very silty to very sandy (very fine grained) from 7000-10; small amount of white to very light gray dolomite from 7000-10 and a moderate amount at the bottom, this dolomite is fine to finely crystalline
- 7015 8035 20 Dolomite, brownish black, some brownish gray, some brownish black to black (shaly); somewhat to moderately argillaceous; some very light gray, fine to medium crystalline dolomite in the upper part and a little in the lower part
- 7035 7060 25 Dolomite, light to light brownish gray, some medium gray to olive gray, finely crystalline; a moderate to large amount of brownish gray to brownish black, finely crystalline dolomite, moderately argillaceous with some shale streak; silty
- 7060 7070 10 Dolomite, brownish black to black, some brownish gray, shaly with some dolomitic shale, somewhat anhydrous in the upper part, highly calcareous in the lower part
- 7070 7080 10 Limestone (argillaceous) to shale (highly calcareous), grayish black, dolomitic, moderate amount in the upper part to a large amount at the bottom; dolomite, brownish black to black, argillaceous with some dolomitic shale, highly calcareous
- 7080 7115 35 Dolomite, brownish black, some brownish black to grayish black (shaly), some light brownish gray to medium gray, somewhat to moderately argillaceous, highly calcareous; some brownish black to grayish black, dolomitic, shaly, limestone; some grayish black, highly calcareous shale in the upper part
- 7115 7127 12 Limestone, brownish gray to dark gray and brownish black, shaly with some calcareous shale, dolomitic; dolomite, brownish black to grayish black, argillaceous with some shale, highly calcareous
- 8127 7150 23 Limestone, brownish black mottled with light gray to brownish gray, highly oolitic, somewhat dolomitic, moderately to highly dolomitic in the lower part, silty, with some very fine sand in the upper part, somewhat to moderately argillaceous very ~~shaly~~ cherty ~~in the~~ in the middle part; some light brownish gray to medium gray dolomite in the lower part
- 7150 7157 7 Dolomite, light brownish gray, finely crystalline; moderate amount of brownish black, dolomitic limestone, somewhat argillaceous, silty
- 7157 7165 8 Dolomite, brownish gray to brownish black, mostly finely crystalline, some medium crystalline, calcareous
- 7165 7175 10 Dolomite (highly calcareous) to limestone (dolomitic, shaly) brownish black to grayish black, some brownish gray to medium dark gray, finely crystalline, very silty to sandy (very fine grained) in the lower part
- 7175 7205 30 Limestone, brownish gray to brownish black mottled with light brownish gray to medium gray, highly oolitic?, highly fossiliferous (ostracods), dolomitic, sandy to a light gray and light brownish gray, calcareous, dolomitic sandstone
- 7205 7215 10 Dolomite, brownish black to grayish black, calcareous, silty to a highly dolomitic siltstone to sandstone (very fine grained) that is medium dark to dark gray; some brownish gray to brownish black, dolomitic limestone
- KEEFER SANDSTONE, 43 Feet.
- 7215 7258 43 Sandstone, very light gray to medium gray, very fine grained silty to a very fine sandstone and coarse siltstone in the lower part, somewhat calcareous, calcareous at the top, slightly calcareous at the bottom, highly dolomitic; small amount of dark gray, silty shale in the lower part

W00-351

ROSE HILL, 414.6 Feet.

- 7258 7289 31 Shale, medium dark gray to dark gray; a moderate to large amount of medium gray to medium dark gray and olive gray, dolomitic siltstone
- 7289 7355 66 Shale, grayish brown to dusky brown and brownish gray; some medium dark gray to olive gray and dark gray, dolomitic, somewhat calcareous siltstone to shale; small amount of medium gray dolomite to sandstone (dolomitic); a large amount of medium dark gray to dark gray and greenish gray shale at the top
- 7355 7425 70 Shale, brownish gray to dusky brown and ~~brownish gray~~, some dusky brown to olive black; small amount of medium dark gray, dolomitic siltstone in the upper part
- 7425 7434 9 Shale, medium dark gray to olive gray and dark greenish gray; a large amount of brownish gray to grayish brown, ^{dark brown} small amount of medium dark gray to greenish gray, dolomitic siltstone
- 7434 7465 31 Shale, medium dark gray to dark greenish gray with some greenish gray to medium gray dolomitic nodules; a very small amount of medium gray to greenish gray ^{glauconite} siltstone
- 7465 7490 25 Shale, medium dark gray to dark greenish gray, some ~~medium~~ medium dark gray to brownish gray and dusky brown; small amount of dolomitic siltstone to dolomite
- 7490 7502 12 Shale, medium dark gray to dark greenish gray with some olive gray to medium gray, dolomitic siltstone to dolomite, small amount is ^{glauconite} ~~greenish~~; some brownish gray to dusky brown shale
- 7502 7518 16 Shale and siltstone, dark greenish gray to medium dark gray, dolomitic to a medium to medium dark gray and dark greenish gray shaly and silty dolomite in the lower part; shale, brownish gray to grayish brown, dusky brown, some in the upper part and a moderate amount in the lower part; trace of grayish red to dusky red, ferruginous dolomite in the lower part
- 7518 7535 17 Shale, brownish gray to dusky brown, some medium dark gray to dark greenish gray and olive gray; some medium gray, coarse grained dolomite with greenish gray (shaly) streak and small amount of highly ferruginous material
- 7535 7555 20 Shale, brownish gray to dusky brown, small amount of dark greenish gray; small amount of medium gray, medium crystalline dolomite with greenish gray (shale) and grayish red ferruginous streaks

Top	Bottom	Thickness	
7555	7585	30	Shale, medium dark gray to brown and dusky brown, some dark green ^{ish} gray to olive gray; some olive gray to green ^{ish} gray, dolomitic siltstone with some medium gray, coarse crystalline Dolomite.
7585-	7605	20	Siltstone, medium dark gray to dark green ^{ish} gray and olive gray, somewhat dolomitic in the upper part to dolomitic in the lower part; brown ^{ish} gray to dusky brown Shale; small amount of dolomite.
7605	7625	20	Siltstone and moderate amount of shale, medium dark gray to green ^{ish} gray and olive gray, dolomitic with some light to medium gray, coarse crystalline dolomite; some of the dolomite contains streak of shaly hematite, some brown ^{ish} gray to dusky brown shale.
7625	7640	15	Dolomite, medium to dark gray with some light gray, medium to coarse crystalline, small amount of the dolomite contains streak of shaly hematite; some dark green ^{ish} gray to medium dark gray and some brown ^{ish} gray to dusky brown shale and siltstone.
7640	7650	10	Shale, dark green ^{ish} gray to medium dark gray, some olive black, small amount of brown ^{ish} gray to dusky brown; a moderate amount of medium to dark gray, medium to coarse crystalline dolomite with a small amount of shaly hematite.
7650	7665	15	Some siltstone to sandstone (very fine grain), light to dark gray, some gray ^{ish} black quartz ^{ed} , shale and some siltstone, medium dark gray to olive gray and dark green ^{ish} gray, some brown ^{ish} gray to dusky brown; small amount of medium to dark gray dolomite with streak of shaly hematite.
7665	7667	02	No sample.
7667	7672.6	5.6	Shale and siltstone, medium dark gray to greenish gray. (Cored from 7667 to 7860; see core description)

TUSCORORA FORMATION, 138.6 FEET

7672.6 7811.2

JUNIATA FORMATION, 619 Feet

7860	7910	50	Shale, grayish brown, silty; small amount of medium dark to dark gray and dark greenish gray shale and siltstone.
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- 7910 8070 160 Shale to siltstone, grayish brown, sandy (very fine) in part with some grayish brown sandstone (from 7940-7950); small amount of shale and siltstone, medium dark gray to greenish gray, dark greenish gray to brownish gray and dusky brown; small amount of mottled brown and dark gray to light gray, somewhat calcareous, very fine grained sandstone from 8035 -8070
- 8070 8097 17 Shale to siltstone, grayish brown, slightly calcareous, sandy (very fine grained) in part; some shaly siltstone to sandstone (very fine), medium gray to greenish gray mottled with dark gray to grayish black, small amount of grayish brown mottled with dark gray
- 8097 8150 53 Siltstone to sandstone (very fine grained), mottled light gray to greenish gray with grayish black, some light gray to grayish brown, some grayish brown mottled with grayish black, somewhat calcareous, slightly dolomitic, argillaceous; small to moderate amount of shale to siltstone, grayish brown and some medium dark gray to dark greenish gray, a moderate amount
- 8150 8170 20 Shale, brownish gray to dusky brown, some brownish black, medium dark gray to dark greenish gray (glauconite in part); trace of medium gray to coarsely crystalline dolomite (these samples appear to be caved material from Rose Hill)
- 8170 8220 50 Shale to siltstone, grayish brown, sandy (very fine), in part; a large amount of medium and brownish gray to grayish black siltstone to very fine sandstone at 8200-05, some of this sandstone is present in many of the other samples
- 8220 8270 50 Shale to siltstone, grayish brown, sandy (very fine) in part
- 8270 8330 60 Shale to siltstone, grayish brown with a very large amount and often most of the sample is shale, brownish gray to dusky brown, medium dark gray to dark greenish gray and a very small amount of medium to dark gray, coarsely crystalline dolomite and some siltstone of various colors (most of the samples appear to be caved material)
- 8330 8370 40 Shale, grayish brown; moderate amount of medium gray to brownish gray and greenish gray, calcareous siltstone at the bottom and some in the middle and upper ~~part~~ part
- 8370 8385 15 Siltstone, greenish gray to medium dark gray, shaly, somewhat calcareous, dolomitic; some ~~greenish~~ brown shale; some caved material
- 8385 8430 45 ✓ Shale, grayish brown; a moderate to large amount of medium dark to dark gray shale in the upper part and some in the lower part

MARTINSBURG FORMATION Feet.

- 8430 8470 40 Shale, dark gray, calcareous with some fossiliferous limestone fragments; some medium dark gray, calcareous siltstone at 8430 - ~~70~~
70 - 75
- 8470 8535 65 Shale, dark gray, calcareous with some fossiliferous limestone fragments and some highly calcareous, siltstone (a very large amount of caved material)
- 8535 9255 720 Shale and siltstone, medium dark to dark gray, calcareous, mottled with light to medium gray, very highly fossiliferous limestone (almost a coquina in some parts) fragments
- 9255 9415 160 Shale, dark gray, calcareous, highly fossiliferous with mottled light and dark gray fossiliferous Limestone fragments (brachiopoda and bryozoa)
- 9415 9665 250 See core description