



F. D. Caldwell No. 42 (6181) Well.

Lincoln District, Wayne County, W. Va.
 By United Fuel Gas Company, Charleston, W. Va.
 Located 1.76 miles S. of 37° 55' and 3.41 miles W. of 82° 20'
 Naugatuck Quadrangle - C
 Elevation 687.95' L
 Permit Way-465
 Drilling commenced May 15, 1947; completed Aug. 5, 1949

Dry hole

Fresh water, 58', hole full, 542' 2 BPH

Salt water 3335', 1 1/2 BPH, 6627' 1/2 BPH; 6641' 1/2 bbl every 3 hours, 7329', 1 gal. per hour; 7422'-7423', 1/2 bbl per 2 hours; 7760-7763' 10 gals. in 2 hours; 7828-7900, filled up to 7425

Oil and gas show 1064'; gas, 1968, 2200, 3140, 3285'

Gas 3768-3774, 3-1/8" W. 2", 257 M, exhausted; gas test 3796-3798', 3/10 W. 2", 73M; gas show 6359-6360; oil show 6359-6360; oil show 6459', gas show 6542-6543; gas show 6614-6615'; gas 7160-7162', 3/10 W. 1", 18M; oil show 7168-7176'; gas show 7265'; Gas 7351' 6/10 W. 1', 26M, gas 7760-7763, 10/10 W. 1", 33 M; gas 7825-7827', 20/10 W. 1", 47 M.

Temperature at 7763', 140° F; at 7899', 146° F.

Section based on samples from 12' to 7863'; examined by Russell R. Flowers

Pottsville Series, 818 + FEET

Top Bottom Thickness

Top	Bottom	Thickness	Description
12	185	173	Siltstone (with shaly structure) and some silty shale, medium dark gray, medium to medium dark gray, some dark-gray, highly micaceous, somewhat sideritic (yellow-brown spots), somewhat carbonaceous; some olive-gray (somewhat sideritic) to dark yellowish brown (very highly sideritic) siltstone; generally lighter in color but more sideritic in the lower part of this interval
185	193	8	Some coal (coal 190-193 - from driller's log); shale, grayish-black to black, highly carbonaceous; siltstone and shale, medium dark to dark-gray; a moderate amount of light olive gray to olive-gray and brownish-gray clay (Ganister?)
193	198	5	Siltstone to sandstone (very fine), medium- to medium dark gray, highly micaceous, chloritic, <i>sideritic</i> (speckled with dark brown yellowish brown siderite) to very highly sideritic (dark to dusky yellowish brown); some light olive gray to brownish-gray clay
198	203	5	Sandstone, medium to medium dark gray, very fine to a medium dark, to dark-gray, highly micaceous, kaolinitic siltstone; some black, highly carbonaceous shale; some dark to dusky yellowish brown, shaly siderite
203	209	6	No sample
209	252	43	Sandstone, medium-gray (with dark yellowish brown siderite specks and streaks), very fine grained, fine-grained in part very silty, highly micaceous, contains chlorite and kaolinitic material, some carbonaceous material; small amount of medium dark to dark-gray shaly siltstone; a little siderite

252	282	30	Sandstone, (very fine) to siltstone, light olive gray to medium-gray, shaly (black carbonaceous streaks), sideritic, highly micaceous; some dark-gray to grayish-black, shaly siltstone and silty shale (depth corrected from 262 to 280)
280	290	10	Siltstone, medium dark gray to dark-gray (with greenish cast), highly sideritic (mostly brown spherulites), micaceous
290	323	33	Sandstone, very light gray, fine to medium grained, contains some muscovite and chlorite, some sideritic cement (No sample from 300 to 310)
323	396	73	<i>layered</i> Siltstone, medium- to dark-gray, shaly, finely inter-laid with medium dark gray to grayish-black, silty shale; both are micaceous, sideritic in part and contain some carbonaceous material
396	434	38	Siltstone, medium to medium dark gray, shaly to a dark-gray, silty shale, some olive-gray (sideritic) to dusky-brown (siderite)
434	470	36	Shale, grayish-black, sandy in part, some dark-gray (with black, carbonaceous streaks); some black, carbonaceous shale to coal in the lower part; some medium- to medium dark gray sandstone, calcareous in part, highly sideritic in part (dark to dusky yellowish brown)
470	490	20	Shale and siltstone, medium- to dark-gray, some grayish-black, sideritic in part
490	520	30	Sandstone, very light gray, fine- to medium-grained, subrounded, contains many grains of chlorite and rock fragments, somewhat dolomitic
520	547	27	Sandstone, very light to light-gray, fine- to medium-grained, subrounded, some coarse (rounded) grains; some medium to dark-gray siltstone and shale; some dark to dusky yellowish brown siderite; small amount of calcite and dolomite cement
547	572	25	Sandstone, very light to light-gray, very fine to fine-grained, subangular to subrounded, some interstitial chlorite, some coarse grains at the bottom
572	584	12	Shale, dark-gray to grayish-black, very silty
584	640	56	Sandstone, white to very light gray, quartzose, fine-grained, subrounded, some medium grains, fine- to medium-grained at the bottom; small amount of grayish-black, highly carbonaceous shale and dark to dusky yellowish brown, shaly siderite at 626 to 633
640	642	2	Coal; siltstone, dark-gray; a very large amount of fine- to medium, white sandstone (broken into individual grains)
642	649	7	Clay-shale, medium dark to dark-gray, silty and sandy (very fine) in part, a very large amount of, dusky yellowish brown spherulites of siderite
649	657	8	Siltstone, medium- to medium dark gray, sandy to a very fine, light- to medium-gray sandstone
657	670	13	No sample
670	740	70	Sandstone, very light gray, quartzose, very fine grained, subrounded, fine to very fine at 710 to 720; small amount of dusky yellowish brown, shaly siderite

740	756	16	Shale, grayish-black, some grayish-black to dusky yellowish brown (sideritic)
756	784	28	Sandstone, (very fine) to siltstone, light-gray to light olive gray and medium-gray, closely interbedded with a dark-gray to grayish-black, very silty, somewhat sideritic shale <i>layered</i>
784	818	34	Shale, dark-gray to grayish-black, small amount of dusky yellowish brown (highly sideritic) silty with some interlayers of light olive gray to medium-gray siltstone
818	830	12	Sandstone, white to very light gray, very fine grained, subrounded, some fine grains
<u>Mauch Chunk Series, 279 Feet.</u>			
830	835	5	Clay-shale, medium-gray to olive-gray (with fossiliferous limestone spots), dark greenish gray to medium dark gray (sideritic in part)
835	841	6	Clay-shale, medium dark gray to dark greenish gray, calcareous; small amount of olive-gray to dark greenish gray limestone; a moderate amount of grayish-brown shale
841	859	18	Shale and clay-shale, grayish-brown to dusky-brown in the upper part, grayish-brown to very dusky red in the lower part; some medium dark gray to dark greenish gray clay-shale, calcareous in part
859	865	6	No sample
865	872	7	Shale, dark-gray to grayish-black, very silty; small amount of shale, grayish-brown to very dusky red, dark greenish gray to medium dark gray, calcareous in part
872	889	17	Shale, grayish-brown, some very dusky red to reddish-gray; shale, dark greenish gray to medium dark gray, sandy in part; some light- to medium-gray and greenish-gray, calcareous, fine sandstone; some medium-dark to dark-gray, silty, somewhat carbonaceous shale
889	⁹ / ₈₇₄	5	Shale, grayish-brown to brownish-gray, some dusky-brown to very dusky red; some limestone (nodules?), olive-gray to dark greenish-gray, some dusky yellowish brown to very dusky red; small amount of dark-gray shale
⁹ / ₈₇₄	914	20	No sample
914	920	6	Siltstone and shale, medium dark to dark-gray, some dark greenish gray; some light- to medium-gray, very fine sandstone; some varicolored shale with limestone nodules
920	937	17	No sample
937	947	10	Shale, grayish-brown; some grayish-brown to grayish-red, some medium dark gray
947	968	21	No sample
968	975	7	Shale, grayish-brown, some grayish-brown to grayish-red, some reddish-gray; some light olive gray to greenish-gray, shaly dolomite
975	1000	25	No sample
1000	1014	14	Shale, medium dark gray, some dark-gray, soft, fissile, calcareous in part; a large amount of medium-gray to olive-black, somewhat silty and sandy limestone

1014	1020	6	Limestone (very shaly) to shale (highly calcareous), medium- to dark gray, soft shale ; a small amount of grayish-brown to grayish-red shale; some medium- to dark-gray ^{soft shale}
1020	1027	7	Dolomite, (very shaly) to shale, olive-gray to dark greenish gray; a large amount of medium dark to dark-gray, soft shale, contains some plant spores, silty and calcareous in part
1027	1057	30	No sample
1057	1061	4	Sandstone, white, very fine to fine-grained, sub-rounded to rounded, quartzose
1061	1078	17	No sample
1078	1104	26	Limestone, dark-gray to olive-gray and olive-black, very shaly, fossiliferous, contains a trace of chert; some medium- to dark-gray, soft, fissile shale, small amount is dark greenish gray and grayish-red to grayish-brown
1104	1109	5	Shale, medium dark to dark-gray, fissile, soft; small amount of grayish-brown to reddish-gray shale

Greenbrier Limestone, 205 Feet.

1109	1114	5	Limestone, light-gray to light olive gray, silty, somewhat shaly; some medium to medium dark-gray, fossiliferous limestone
1114	1120	6	Limestone, light olive gray to brownish-gray, some olive-gray to olive-black and brownish-black, very shaly, silty, a few sand grains; a very small amount of chert
1120	1148	28	Limestone, very light gray to light olive gray, clastic texture, slightly silty, somewhat shaly, fossiliferous, oolitic in part
1148	1158	10	Limestone, light olive gray to olive-gray (with light-gray spots), very shaly, somewhat silty
1158	1174	16	<i>Limestone, dark yellowish brown, some olive-gray, silty, cherty</i> <i>the lower part, highly oolitic</i> Limestone, light olive gray to olive-gray, clastic texture, a large amount of is highly oolitic; somewhat silty and sandy (very fine), somewhat shaly
1174	1200	26	
1200	1223	23	Limestone, light olive gray to olive-gray, some dark yellowish brown (a large amount in the upper part), clastic texture, mostly oolites that are loosely cemented, somewhat silty and sandy (very fine, a few medium grains)
1223	1245	22	Limestone, light olive gray to light-brown, clastic texture, mostly oolites, very friable, somewhat silty; a large amount of olive-gray to medium dark gray, very shaly limestone (corrected from 1245 to 1244?)
1244	1257	13	Limestone, very light gray to light olive gray, highly oolitic in part, somewhat silty; a moderate amount of olive-gray to dark greenish gray, very shaly limestone to a medium dark gray, highly calcareous shale, some greenish-brown (shaly) material
1257	1283	26	Limestone, light olive gray to olive-gray and dark yellowish brown, crystalline, very fine grained, somewhat silty and sandy
1283	1302	19	Limestone, light olive gray to olive gray, some dark yellowish brown, clastic texture, very highly oolitic, silty

130E 1312 10 Dolomite to anhydrite, light- to medium-gray, very silty to a dolomitic siltstone; some white anhydrite; a moderate amount of olive-gray, very shaly dolomite in the upper part and a large amount at the bottom

Maerady Formation, 28 Feet.

1312 1317 5 Shale, grayish-brown to very dusky red, medium dark gray, silty in part, somewhat dolomitic

1317 1330 13 Shale, grayish-red to grayish-brown, silty in part

1330 1340 10 Siltstone and some shale, brownish-gray and grayish-brown to very dusky red, medium- to dark-gray (with olive and greenish casts)

Pocano Formation, 580 Feet.

1340 1354 14 Siltstone and shale, medium- to dark-gray, highly kaolinitic, micaceous, somewhat carbonaceous, small amount of dark yellowish brown, sideritic siltstone

1354 1375 21 Siltstone, medium-gray, some dark yellowish brown (sideritic), contains dark-gray (shaly) streaks and layers, highly kaolinitic

1375 1450 75 Siltstone, medium to medium dark gray, some dark yellowish brown (sideritic), highly kaolinitic, somewhat carbonaceous and micaceous; shale, medium dark to dark-gray, silty, somewhat carbonaceous

1450 1656 206 Shale, dark-gray, silty, small amount of dark to dusky yellowish brown (highly sideritic)

1656 1720 54 Shale, medium dark to dark-gray and dark greenish gray (with medium- to dark-gray, fossiliferous, limestone spots), very silty in the lower part; small amount of dark to dusky yellowish brown, sideritic

1720 1780 60 Shale, medium to dark-gray, silty in part; small amount of dark to dusky yellowish brown, shaly siderite

1780 1815 38 Shale and siltstone, medium to medium dark gray, the siltstone is kaolinitic and pyritic in part; some dark-gray shale; small amount of dark to dusky yellowish brown, shaly siderite

1815 1831 16 Shale and siltstone, medium to medium dark gray, interbedded with dark-gray to grayish black

1831 1852 21 Shale, grayish-black to black, carbonaceous (Coffee shale 1832 to 1852 - drillers' log)

1852 1860 8 Sandstone, very light gray to yellowish-gray, very fine grained, calcareous, somewhat pyritic (Berea - Top of Berea 1852 in drillers' log)

Devonian Shales, 1245 Feet.

1860 1863 3 Siltstone, medium light to medium dark gray; some a medium to medium dark gray shale

1863 1890 27 Siltstone, light- to medium-gray, some light olive gray to olive-gray; shale, medium dark to dark-gray, silty

1890 1940 50 Siltstone, light olive gray, coarse-grained, highly argillaceous; shale and some siltstone, medium to medium dark gray

1940 2010 70 Shale, grayish-black to black, carbonaceous, very silty

2010	2046	36	Shale and some siltstone, medium to medium dark gray, dark-gray to grayish-black and black (carbonaceous)
2046	2054	8	No sample
2054	2220	166	Shale, medium to medium dark gray, some dark-gray to grayish-black; siltstone, light olive gray to medium light gray, some medium to medium dark gray; small amount of moderate to dark yellowish brown, sideritic siltstone and shale
2220	2300	80	Shale, brownish-black to black, carbonaceous, silty; a large amount of medium light to medium dark gray siltstone and shale; small amount of moderate to dark yellowish brown, sideritic shale and siltstone
2300	2375	75	Shale, brownish-black to grayish-black, somewhat carbonaceous, silty
2375	2393	18	Shale, dark-gray to grayish-black and brownish-black, some medium to medium dark gray
2393	2487	94	Shale and some siltstone, medium to medium dark gray; shale, dark-gray to grayish- and brownish-black
2487	2580	95	Shale, dark-gray to brownish- and grayish-black, contains many plant spores (brown and waxy); a moderate to large amount of olive-gray to medium dark gray
2580	2604	24	Shale, brownish-black and grayish-black to black, carbonaceous
2604	2643	39	Shale, brownish- and grayish-black to black, medium- to dark-gray (with olive cast); some olive-gray to brownish-gray, somewhat dolomitic siltstone
2643	2675	32	Shale, grayish- and brownish-black to black, carbonaceous; a large amount of olive-gray to dark greenish gray and medium dark gray siltstone and shale
2675	2814	139	Shale, brownish- and grayish-black to black, (carbonaceous), some black (highly carbonaceous) in the lower part, contains a very large number of plant spores; some medium-gray to olive-gray shale
2814	2990	176	Shale and siltstone, medium-gray to dark greenish gray and medium dark gray, some olive-gray to dark-gray; small amount of grayish-black, carbonaceous shale in the upper part, a moderate amount in the lower part
2990	3032	42	Shale, medium to dark-gray (with brownish and greenish casts), some dark-gray to brownish-black, some brownish- and grayish-black to black
3032	3065	33	Shale, dark greenish gray to medium dark gray, some dark-gray to brownish-black, a moderate to large amount of brownish- and grayish-black to black (carbonaceous)
3065	3093	28	Shale, dark-gray to brownish-black, some grayish-black to black (carbonaceous), pyritic in part; a very small amount of olive-gray to medium-gray, very highly micaceous, very silty, very fine sandstone (metabentonite)
3093	3103	10	Shale, medium to medium dark gray, some dark-gray to brownish-black, small amount of grayish-black to black (carbonaceous)
3103	3105	2	Shale, grayish-black to black, highly carbonaceous, pyritic

Huntersville Chert, 85 Feet.

3105	3130	25	Limestone (very shaly) to shale (silicified, highly calcareous), brownish-gray to dark-gray and brownish-black; some light-gray to brownish-gray chert
3130	3153	23	Limestone (very shaly, silty) to shale (highly calcareous, silicified), brownish-gray to dark-gray; some dark-gray to brownish-black; some light-gray, milky, translucent chert
3153	3180	27	Limestone (very silty and very sandy) to sandstone (highly calcareous, very fine, very silty), light-gray to olive-gray, small amount of dark-gray in the lower part; a large amount of white (translucent) to light-gray (transparent to milky), somewhat calcareous chert
3180	3190	10	Limestone, light-gray to brownish-gray, very shaly to a highly calcareous shale, dark-gray to brownish-black; a large amount of light-gray to brownish-gray (somewhat shaly) of light-gray to brownish-gray (somewhat shaly) calcareous chert; a very small amount of very light gray, sandy (fine to medium, well rounded) limestone from 3185 to 3190

↑
(Oriskany Horizon)

Helderberg Formation, 65 Feet.

3190	3203	13	Sandstone (very fine, highly calcareous) to limestone (very sandy), silty), light-gray to light olive gray, some medium-gray; dolomitic; chert, white (opaque) to light-gray (translucent)
3203	3219	16	Limestone (very shaly) to shale (highly calcareous), dark-gray to brownish-black; siltstone (sandy, very fine to silty chert, light- to dark-gray, highly calcareous, dolomitic; both siltstone and shale are glauconitic
3219	3228	9	Siltstone (shaly) and shale (silty), medium dark to dark-gray, some dark-gray to brownish-black, highly calcareous to a very silty and shaly limestone, somewhat glauconitic; some light-gray to dark-gray (shaly) calcareous chert
3228	3234	6	Shale to siltstone, dark-gray, highly calcareous with some very shaly and very silty limestone, very cherty (medium to dark-gray, translucent), somewhat glauconitic
3234	3246	12	Limestone, light olive gray to dark yellowish brown, slightly dolomitic; shale and sandstone (very fine), dark-gray, very highly calcareous, pyritic, somewhat glauconitic, a large amount in the lower part
3246	3257	11	Shale (highly calcareous, silty) and some limestone (very shaly), dark-gray, very cherty (medium- to dark-gray), pyritic in part, somewhat glauconitic; slightly dolomitic
3257	3270	13	Limestone, light olive gray to medium dark gray, highly dolomitic; limestone, brownish-gray to brownish-black; some very shaly limestone as above interval
3270	3275	5	Limestone, brown ish-gray to brownish-black, oolitic in part; limestone, light olive gray to medium-gray, dolomitic, sandy; some dark-gray, very cherty, very shaly limestone to calcareous shale

Salina and Lockport, 505 Feet.

3275	3281	6	Dolomite, olive-gray to brownish-black, very finely crystalline, calcareous; a very small amount of chert and pyrite
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3281	3287	6	Dolomite, brownish-gray to brownish-black, calcareous, very sandy and silty; a large amount of white coarsely crystalline dolomite
3287	3273 ⁹	6	Dolomite, dark brownish gray to brownish-black, very finely crystalline; some dark yellowish brown dolomite with a little white anhydrite
3293	3300	7	Dolomite, dark yellowish brown to brownish-black, extremely fine to very fine crystalline; some white and transparent, fine to coarsely crystalline anhydrite
3300	3334	34	Dolomite, dark yellowish brown and dark brownish gray to brownish-black, finely crystalline; small amount of anhydrite and quartz sand
3334	3344	10	Dolomite, medium dark gray to brownish-gray and brownish-black, extremely fine to fine crystalline, silty (anhydrite and some quartz)
3344	3362	18	Dolomite, brownish-gray to brownish-black, some olive-gray to brownish-gray, shaly, with a large amount of anhydrite silt; a moderate amount at the top to a very large amount in the lower part of white to translucent and transparent anhydrite
3362	3372	10	Dolomite, brownish-gray to dark yellowish brown, some brownish-black, finely crystalline; small amount of anhydrite
3372	3380	8	Dolomite, brownish-gray to dark-brown (finely crystalline) to olive-gray (lithographic), small amount of anhydrite; dolomite, medium-gray (shaly) to a dark-gray dolomitic shale
3380	3391	11	Dolomite, brownish-black, some brownish-gray to brownish-black, finely crystalline; trace of anhydrite
3391	3394	3	Dolomite, brownish-gray to brownish-black, very finely crystalline, silty (anhydrite and quartz?)
3394	3398	4	Dolomite (brownish-gray) to dolomite-anhydrite rock (brownish-gray to medium-gray) with some dark-gray (shaly)
3398	3500	108	Dolomite-anhydrite rock, dark yellowish brown to brownish-black, a moderate to large amount of white to brownish-gray (dolomitic) anhydrite; a large amount of dark colloidal material, mostly anhydrite 3465-3476, mostly dolomite from 3490 to 3500
3500	3517	17	Dolomite, dark yellowish brown to brownish-black, very finely crystalline, some anhydrite, cherty (transparent to opaque); a moderate amount of medium dark gray dolomite
3517	3524	7	Dolomite, brownish-black and brownish-gray to brownish-black, extremely fine crystalline, argillaceous; small amount of transparent to opaque chert, some is oolitic (dark oolites)
3524	3535	11	Dolomite, brownish-gray to dusky yellowish brown, very fine to finely crystalline, some anhydrite; small amount of transparent to opaque chert
3535	3565	30	Dolomite, dusky yellowish brown to brownish-black, finely crystalline, some anhydrite silt; small amount of chert at the top; some doubly terminated, medium-grained, clear quartz crystals at the bottom
3565	3574	9	Dolomite, brownish-gray to dark yellowish brown, extremely fine to very fine crystalline, silty (mostly anhydrite, some euhedral clear quartz of silt and sand size); a very small amount of chert
3574	3594	20	Dolomite, dusky yellowish brown to brownish-black, very finely crystalline; a trace of anhydrite

some in oolitic (dark oolites)

3594	3615	19	Dolomite, brownish-gray to brownish-black, finely crystalline, dolomitized former oolitic limestone, & very small amount of anhydrite silt
3613	3621	8	Dolomite, brownish-black at the bottom, extremely fine to very fine crystalline, slightly shaly, silty (mostly anhydrite)
3621	3625	4	Dolomite, light olive gray to brownish-gray, some brownish-gray to dark-gray, very finely crystalline, very silty (anhydrite)
3625	3630	5	Dolomite, light olive gray to brownish-gray, very finely crystalline, silty and somewhat sandy (mostly anhydrite)
3630	3645	15	Dolomite, brownish-gray to brownish-black, very finely crystalline, silty (at least some of the silt is anhydrite), a very little fine anhydrite sand
3645	3650	5	No sample
3650	3661	11	Dolomite, brownish-black, some brownish-gray to brownish-black, shaly, very shaly in the lower part, silty (at least part is anhydrite)
3661	3670	9	Dolomite-anhydrite rock, brownish-black, some brownish-gray to brownish-black, contains dark bands of shale
3670	3690	20	Dolomite, olive-gray to medium dark gray, some medium dark gray to dark greenish gray, very silty to dolomitic siltstone; dolomite, olive-gray to brownish-black, very silty to a silty, dolomitic shale
3690	3700	10	Shale (highly dolomitic) to dolomite (very shaly), brownish-black; the dolomite is very finely crystalline
3700	3712	12	Shale (highly calcareous) to limestone (very shaly), brownish-black, some olive-black to brownish-black, dolomitic; some brownish-black, highly oolitic, shaly limestone; some brownish-gray limestone in the lower part
3712	3724	12	Limestone (shaly) to shale (highly calcareous), brownish-black to grayish-black, highly dolomitic in part, very silty to sandy (very fine) in the lower part; a large amount of olive-gray to brownish-gray and medium to medium dark gray dolomite
3724	3736	12	Siltstone (highly dolomitic) to dolomite (very silty with some very fine sand), brownish-black to grayish-black, calcareous; some brownish-black, calcareous dolomite (dolomitized oolitic limestone)
3736	3746	10	Limestone, light olive gray to medium-gray, some light gray, sandy (very fine) and silty; a large amount of brownish-black to grayish-black, silty and sandy (very fine), calcareous dolomite
3746	3757	11	Shale (highly dolomitic) to dolomite (very shaly), medium dark gray to grayish-black (with brownish cast), very sandy (very fine)
3757	3762	5	Dolomite (very shaly) to shaly (highly dolomitic), medium dark to dark-gray, some grayish-black, very sandy (very fine to medium, clear glassy quartz), somewhat cherty (transparent to milky)

- 3762 3775 15 Dolomite, medium- to dark-gray, some light-gray, some brownish-gray to brownish-black, sandy (very fine to fine), cherty (translucent), a very small amount of anhydrite, very fine to medium-crystalline
- 3775 3780 5 Dolomite (very sandy) to sandstone (very fine, highly dolomite), dark-gray to grayish-black (with medium-gray spots); some grayish-black, shaly, dolomitic limestone; this sample as a whole is somewhat pyritic

Clinton Formation, 403 Feet.

- 3780 3784 4 Sandstone, very light- to light-gray, very fine grained, some fine grains, quartzose, calcareous, somewhat dolomitic
- 3784 3787 3 No sample
- 3787 3790 3 Sandstone, very light to light gray, very fine to fine-grained, some chert (transparent or broken coarse quartz grains), dolomitic
- 3790 3798 8 Sandstone, very light gray to yellowish-gray, very fine grained, very fine to silt at the bottom, mostly quartz, highly dolomitic
- 3798 3814 16 Siltstone, very light to medium light gray, dolomitic; shale, medium to medium dark gray
- 3814 3819 5 Siltstone to sandstone (very fine), very light gray to yellowish-gray, some light- to medium-gray; shale, medium dark gray, some brownish-gray to brownish-black
- 3819 3859 40 Shale, brownish-gray to dusky-brown, silty and dolomitic in part; a large amount of siltstone and some shale, olive-gray to dark greenish gray, dolomitic in part
- 3859 3884 25 Shale, brownish-gray to dusky-brown; some siltstone and shale, olive-gray to dark greenish gray
- 3884 3938 54 Shale, brownish-gray to dusky-brown
- 3938 4013 75 Shale, medium dark gray to dark greenish gray, slightly dolomitic in part; a large amount of brownish-gray to dusky-brown shale; some olive-gray siltstone at 3980 to 4003; some brownish-gray siltstone at the bottom
- 4013 4019 6 Shale, medium dark gray to dark greenish gray, small amount is glauconitic; a moderate amount of brownish-gray to dusky-brown shale; a small amount is very dusky red (highly ferruginous)
- 4019 4033 14 Shale, brownish-gray to dusky-brown, a very small amount of very dusky red (ferruginous); a moderate amount of medium dark gray to dark greenish gray; small amount of light-gray to light olive gray and medium gray dolomite
- 4033 4088 55 Shale, brownish-gray to dusky-brown, some medium dark gray to dark greenish gray
- 4088 4104 16 Shale, brownish-gray to dusky-brown; siltstone and shale, greenish-gray to dark greenish gray and medium dark gray (the siltstone is dolomitic)
- 4104 4125 21 Siltstone and shale, light olive gray to dark greenish gray and medium dark gray; some brownish-gray to dusky-brown shale; small amount of light- to medium-gray dolomite (with much red ferruginous, shaly material)

- dusky
- 4125 4133 8 Hematite (shaly) to shale (ferruginous), very dusty red, highly oolitic and piscolitic (compacted), shale, dark greenish-gray to medium dark gray; some brownish-gray to dusky-brown shale; most of this interval is the greenish-gray shale
- 4133 4147 14 Shale, dark greenish gray to medium dark gray; some brownish-gray to dusky-brown shale; some medium-gray to ~~to~~ olive-gray, dolomitic siltstone; small amount of very dusky red, highly oolitic and piscolitic hematite
- 4147 4160 13 Shale, medium dark gray to dark greenish gray, silty in part (dolomitic); some olive-gray to medium-gray, dolomitic siltstone; some brownish-gray to dusky-brown shale
- 4160 4183 23 Shale, medium dark gray to dark greenish gray; some olive-gray to medium-gray, dolomitic siltstone; a small amount of light- to medium-gray, very silty dolomite

Medinan Series, 122 Feet.

- 4183 4188 3 Sandstone, white to very light gray, some light greenish gray, very fine to fine grained, some medium (rounded grains), small amount is light- to medium-gray (shaly and calcareous). Top of the Clinton is at 4188 (from drillers log)
- 4188 4195 9 Sandstone, white to yellowish-gray, light- to medium-gray (due to black interstitial material), very fine grained, a very small amount is sideritic; a very large amount of brown ("red") and green shale (probably mostly savings)
- 4195 4204 9 Sandstone, very light gray to light olive gray (slightly sideritic), a very small amount of olive-gray to dark yellowish brown (highly sideritic), very fine grained, silty in part; some medium dark to dark-gray, silty and sandy shale
- 4204 4214 10 Sandstone, very light to light-gray and greenish-gray, very fine to fine-grained, contains some biotite of sand size, small amount is dolomitic, shaly to sandy in part; a moderate amount of medium- to dark-gray shale
- 4214 4231 17 Shale, medium dark to dark-gray, sandy in part; siltstone, light olive gray to olive-gray and medium-gray; some very light to light greenish gray, very fine to fine sandstone in the upper part
- 4231 4238 7 Sandstone, very light gray to greenish-gray, very fine to fine grained, an occasional medium (well rounded) grain, contains some biotite, shaly to a very sandy shale in part; a large amount of medium- to dark-gray shale

Richmond (Juniata) Formation, 156 Feet.

- 4238 4260 22 Shale, medium dark to dark-gray; a large amount of siltstone, medium-gray to olive-gray, dolomitic to highly dolomitic
- 4260 4270 10 Shale, medium to medium dark gray, slightly dolomitic; siltstone, light- to medium-gray, some brownish-gray, highly dolomitic, pyritic in part
- 4270 4289 19 Siltstone and shale, light- to medium-gray, some medium dark gray, dolomitic, highly dolomitic in part, pyritic in part

4289	4296	7	Sandstone, very light gray, some medium-gray, (dark interstitial material), very fine grained, highly pyritic in part; some greenish-gray to medium light gray siltstone in the lower part; slightly dolomitic
4296	4305	9	Sandstone, very light to medium-gray, very fine to greenish-gray siltstone and shale, dolomitic, somewhat pyritic
4305	4329	24	Siltstone, light to medium-gray, calcareous, highly argillaceous to greenish-gray silty shale and shale
4329	4342	13	Shale, dusky-brown, silty, somewhat calcareous
4342	4354	12	Shale, dusky brown, some moderate- to dusky-brown; a moderate to large amount of grayish-black, somewhat calcareous siltstone; some greenish-gray to olive-gray shale
4354	4374	20	Shale, dusky-brown and grayish-brown, somewhat calcareous
<u>Martinsburg Shale, 1026 Feet.</u>			
4374	4510	136	Shale, dark greenish-gray to medium dark gray, (with light-gray to grayish-black, fossil fragments and limestone spots), less green and more gray in the lower part; very silty to calcareous siltstone from 4450 to bottom
4510	4569	59	Shale, medium dark gray, some medium dark gray to dark greenish gray, very silty in part, calcareous to a medium and medium dark gray (with white to light gray spots), highly fossiliferous, very shaly limestone
4569	4633	64	Limestone (very shaly) to shale (very highly calcareous), medium dark to dark-gray (with light- to medium-gray spots), medium dark gray to brownish-gray in the middle and lower parts, highly fossiliferous (a large amount of "red" and "green" shale in many of the samples - cavings)
4633 4652	4652	19	Shale, medium dark to dark-gray (with greenish cast), calcareous; a moderate amount (at the top) to a large amount (at the bottom) of light to medium dark gray, silty, highly fossiliferous limestone
4652	4658	6	Limestone, dark-gray to brownish-black, fossiliferous, very shaly with some calcareous shale
4658	4692	34	Shale, medium dark gray, some medium dark gray to dark greenish gray, calcareous to a limestone, light- to dark-gray, highly fossiliferous, shaly
4692	4782	90	Siltstone, medium dark gray, highly calcareous to limestone, light- to medium-gray, some medium dark gray, silty, highly fossiliferous
4782	4818	36	Limestone, light- to medium-gray, medium dark to dark-gray (very shaly), highly fossiliferous, shaly and very silty to a medium dark gray, calcareous shale and siltstone
4818	4823	5	No sample
4823	4839	16	Siltstone, medium dark to dark-gray and dark greenish gray, highly calcareous with limestone fossil fragments
4839	4859	20	Shale and siltstone, medium dark gray, calcareous to limestone, light to medium-gray, very silty, highly fossiliferous

4859	4878	19	Siltstone, light- to medium-gray, highly calcareous to a medium dark gray, calcareous siltstone and shale
4878	4886	8	Siltstone and shale, medium dark to dark-gray, highly calcareous to limestone, light to medium dark gray, silty, highly fossiliferous shale
4886	4896	110	Siltstone and some shale, medium dark to dark-gray, calcareous with some light- to medium-gray limestone, fossil fragments and some silty limestone spots
4996	5003	7	No sample
5003	5034	31	Shale, dark-gray, some medium dark gray, highly calcareous (with limestone spots and streaks, medium-gray to dark-gray with brownish cast & some fossil fragments)
5034	5055	21	Shale and siltstone, medium dark to dark-gray, calcareous (with light- to dark-gray, limestone, fossil fragments)
5055	5141	86	Shale and siltstone, medium dark to dark-gray, highly calcareous to a light- to dark-gray, shaly and silty fossiliferous limestone, mostly siltstone from 5101 to 5120
5141	5168	27	Limestone, medium- to dark-gray (with light-gray spots), very silty, somewhat shaly
5168	5350	182	Shale and siltstone (highly calcareous) to limestone (very silty and shaly), medium dark to dark-gray, some light- to medium-gray, highly fossiliferous
5350	5400	50	Limestone, medium dark to dark-gray (with brownish cast and light- to medium-gray spots), shaly, fossiliferous; a large amount of medium dark to dark-gray shale, calcareous
<u>Trenton (in part)?, 286 Feet.</u>			
5400	5412	12	Limestone, brownish-gray to dark-gray, very shaly into a calcareous shale in part, fossiliferous
5412	5425	13	Limestone, light brownish gray to medium-gray, somewhat shaly, somewhat silty (much of the silt is euhedral quartz grains); fine to medium crystalline; trace of chert
5425	5480	55	Limestone, brownish-gray to dark-gray and brownish-black, very finely to medium crystalline, shaly, somewhat silty, fossiliferous
5480	5515	35	Limestone, medium dark to dark-gray (with light to medium-gray spots), somewhat fossiliferous, fine to coarse crystalline, shaly, somewhat silty
5515	5600	85	Limestone (very shaly) to shale (highly calcareous), medium dark to dark-gray (with brownish cast), silty, fossiliferous
5600	5609	9	Shale, light to medium light gray, micaceous, soft, contains much biotite (metabentonite); shale, medium dark to dark-gray, calcareous; some medium- to dark-gray limestone
5609	5644	35	Limestone, medium- to dark-gray with light-gray spots fossiliferous in part, very fine to medium crystalline, silty, a little chert; some interbedded, dark-gray, calcareous shale

5644	5686	42	Limestone, light- to dark-gray with some brownish-gray to medium-gray, highly fossiliferous, shaly and silty, cherty in the lower part; some dark-gray to brownish-black, very sandy, shaly limestone at the bottom; some dark gray shale
<u>Chazy-Black River, 1408 Feet.</u>			
5656	5695	9	Shale, light greenish gray to light-gray, contains much biotite (metabentonite); limestone, brownish-gray, very shaly to dark-gray, highly calcareous shale
5695	5782	57	Limestone, brownish-gray, very finely crystalline, lithographic, very shaly, somewhat cherty in the lower part; a large amount of light greenish gray, bentonitic shale except in the bottom sample
5752	5801	49	Limestone, brownish-gray to medium dark gray, very shaly, dolomitic to a calcareous dolomitic shale, darker in color in the lower part
5801	5825	24	Limestone, olive-gray to brownish-gray, very shaly to a highly calcareous shale
5825	5851	26	Limestone, brownish-gray, some brownish-gray to brownish-black, very finely crystalline, dolomitic in part, some brownish-black, calcareous, dolomitic shale
5851	5898	47	Limestone, light olive gray to brownish-gray, very fine to subcrystalline, lithographic
5898	5934	36	Limestone, dark yellowish brown to brownish-black, finely crystalline and somewhat dolomitic at the bottom, slightly shaly
5934	6034	100	Limestone (very shaly) to shale (highly calcareous), brownish-gray to medium dark gray, some dark-gray to brownish-black, somewhat dolomitic, less shaly and more calcareous from 5990 to 6034
6034	6060	26	Limestone, olive-gray to brownish-gray, some brownish-black, somewhat shaly, highly dolomitic in part
6060	6171	111	Limestone, brownish-gray, some brownish-black, highly dolomitic to a calcareous dolomite in part, slightly cherty, brownish-gray to dark-gray (somewhat shaly) at 6140 to 6188, slightly silty in the lower part
6171	6199	28	Limestone, light olive gray (lithographic) to brownish-gray (very fine crystalline), some brownish-black, dolomitic, somewhat silty
6199	6210	11	Limestone, medium- to dark-gray with light gray spots, shaly; a moderate to large amount of light- to medium-gray shale containing biotite (metabentonite)
6210	6254	44	Limestone, olive-gray to brownish-black, shaly, slightly silty and dolomitic; a little light-gray metabentonite
6254	6294	40	Limestone, olive-gray to brownish-black with medium-gray oolitic spots, somewhat shaly, very shaly and highly dolomitic in the middle part; a large amount of light- to medium-gray, soft to fissile metabentonite
6294	6309	18	Limestone, light-gray to light olive gray, dolomitic, very shaly, silty
6309	6323	14	Limestone, brownish-black with some black (shaly) streaks; some white dolomite
6323	6356	33	Limestone, olive-gray to dusky yellowish brown, very shaly from 6323 to 6346, moderately shaly from 6346 to 6356, mostly very fine crystalline

6356	6393	37	Limestone, olive-gray to dusky yellowish brown, lithographic; dolomitic and some calcareous dolomite dolomite (finely crystalline), slightly cherty at the bottom
6393	6428	35	Limestone, light-gray, some light olive gray to brownish-gray, lithographic, slightly dolomitic (finely crystalline)
6428	6479	51	Limestone, olive-gray to brownish-black, shaly, very at the top and 6448 to 6454, very finely crystalline, dolomitic in part shaly 1
6479	6519	40	Limestone, brownish-gray to dusky yellowish brown and brownish-black, very fine to finely crystalline, dolomitic in part, somewhat silty in the upper part
6519	6594	75	Limestone (very shaly) to shale (highly calcareous), dark-gray to brownish-black, a large amount of olive-gray to dark yellowish brown, shaly limestone, very finely crystalline, somewhat dolomitic; some quartz silt in the lower part
6594	6609	15	Limestone, brownish-black, somewhat shaly, very fine to finely crystalline, somewhat dolomitic
6609	6618 ³	4	Limestone, brownish-gray to medium-gray, some brownish-black, dolomitic; some white anhydrite and light- to medium-gray, dolomitic anhydrite
6613-	6618	-5	<i>Limestone, brownish-gray to medium-gray, some brownish-black, dolomitic, some white anhydrite and light- to medium-gray, dolomitic anhydrite</i>
6618	6631	13	Limestone, brownish-black, some brownish-black to black, highly dolomitic, silty and shaly, very finely crystalline; a large amount of dark yellowish brown to brownish-black, lithographic limestone in the lower part
6631	6653	22	Limestone, medium-gray to brownish-gray, highly dolomitic, somewhat silty, shaly in part, very finely crystalline; trace of anhydrite in the middle
6653	6681	8	Limestone, brownish-black to black, dolomitic; very shaly
6681	6672	11	Dolomite, medium to medium dark gray, highly calcareous, very finely crystalline; some brownish-gray to brownish-black limestone
6672	6692	20	Dolomite (highly calcareous) to limestone (highly dolomitic), brownish-black, some brownish-black to black (shaly), a large amount of medium-gray to brownish-black in the lower part
6692	6709	17	Dolomite, light-gray to olive-gray at the bottom, calcareous, silty and shaly in the lower part
6709	6729	20	Limestone, olive-black to brownish-black, shaly; limestone (very shaly) to shale (highly calcareous), brownish-black to black
6729	6751	22	Dolomite, light- to medium-gray, calcareous, silty, very shaly; a large amount of brownish-black to black, highly calcareous, dolomitic shale in the middle part; a large amount of brownish-gray limestone to brownish-black, calcareous shale in the middle part
6751	6761	10	Dolomite, light- to dark-gray, very shaly; limestone, brownish-gray to brownish-black, dolomitic and very shaly in part
6761	6773	12	Dolomite-anhydrite rock, light- to medium-gray and olive-gray; some brownish-black to black, very shaly limestone

6773	6785	12	Dolomite, olive-gray to dark-gray, a large amount of brownish-black to black, very shaly, calcareous
6785	6793	8	Dolomite-anhydrite rock, light- to medium-gray; dolomite, olive-gray to brownish-black, very shaly, calcareous
6793	6799	6	Dolomite, olive-gray to brownish-black, very shaly; trace of metabentonite
6799	6813	14	Dolomite (very shaly) to shale (highly dolomitic), brownish-black to black, calcareous; some dolomite-anhydrite rock, light- to dark-gray
6813	6828	15	Dolomite-anhydrite rock, medium-gray to brownish-gray, some light-gray; a large amount of brownish-gray to is brownish-black limestone in the upper part to a brownish-black to black, calcareous, highly dolomitic shale in the lower part
6828	6847	19	Dolomite, light olive gray to brownish-black, some brownish-black to black, very shaly (a large amount of the shale residue is anhydrite), calcareous
6847	6862	15	Dolomite (very shaly) to dolomitic anhydrite, olive-gray to brownish-black, highly calcareous
6862	6896	34	Shale (dolomitic and calcareous) to very shaly, dolomitic limestone, brownish-black to black; a large amount of olive-gray to brownish-black dolomite-anhydrite rock
6896	6914	18	Dolomite, light-gray to light olive gray, very shaly, some light brownish gray; limestone, brownish-gray to brownish-black, dolomitic, very shaly to a calcareous shale
6914	6919	5	Dolomite, brownish-black to black, some medium-gray to brownish-gray, very shaly to a dolomitic shale, highly calcareous
6919	6942	25	Dolomite, medium-gray to olive-gray, very shaly to dolomitic shale; a large amount of brownish-black to black, calcareous shale; a very large amount of brownish-black, very shaly limestone at the bottom
6942	6950	8	Dolomite, medium dark to dark-gray, very finely crystalline, very shaly to a dolomitic shale, calcareous
6950	6967	17	Dolomite (very shaly) to shale (highly dolomitic) medium- to dark-gray and olive-gray, calcareous; a large amount of dark-gray, calcareous shale at the bottom
6967	6975	8	Dolomite and limestone (very shaly) to shale (dolomitic and calcareous), medium dark gray to brownish-black
6975	7014	39	Shale (highly dolomitic) to dolomite (very shaly), light olive gray to brownish-gray, medium light to medium dark gray
7014	7030	16	Shale (highly calcareous) to limestone (very shaly), brownish-black, is highly dolomitic
7030	7039	9	Shale (highly dolomitic) to limestone (very shaly) medium light to medium-gray (with greenish cast), some brownish-gray to olive-gray to grayish-black
7039	7044	5	Limestone (very shaly) to shale (highly calcareous), brownish-gray to brownish- and grayish-black, dolomitic

7044	7066	22	Shale (highly calcareous) to limestone (very shaly), brownish-gray to brownish-black, dolomitic, a very large amount of medium-gray, very highly dolomitic shale at 7048 to 7055
7066	7071	5	Dolomite (very shaly) to shale (highly dolomitic), medium-gray (with brownish cast), calcareous
7071	7085	14	Shale, (highly calcareous) to limestone (very shaly), brownish-black to grayish-black, dolomitic
7085	7094	9	Shale (sandy) and some sandstone (very fine, very highly argillaceous), dark-gray to grayish black, highly dolomitic, calcareous
7094	7101	7	<u>St. Peter Sandstone, 70 Feet</u> Sandstone, very light gray, very fine to fine-grained, well rounded, some medium grains, dolomitic to highly dolomitic, argillaceous in part
7101	7111	10	Dolomite (very shaly) to shale (highly dolomitic), medium- to dark-gray, somewhat sandy at the top to very sandy (very fine to fine), some medium) at the bottom
7111	7116	5	Sandstone, light-gray, very fine to fine (rounded), dolomitic; some dark-gray, dolomitic shale
7116	7124	8	Sandstone, very light to light-gray, very fine to fine-grained (rounded to well rounded), some medium (well rounded) grains, highly dolomitic, highly argillaceous at the top
7124	7130	6	Shale (highly dolomitic) and some dolomite (very shaly), grayish-black, calcareous
7130	7133	3	Dolomite, medium- to dark-gray, very shaly, sandy in part to a highly argillaceous, dolomitic, light- to medium-gray sandstone
7133	7145	12	Sandstone, white to light-gray, very fine to fine-grained (rounded to well rounded), some medium (well rounded) grains, highly dolomitic, very highly dolomitic and argillaceous from 7135 to 7139, a large number of medium (rounded) grains in the middle part
7145	7158	13	Sandstone, very light to light-gray, very fine to fine grained, rounded to well rounded quartz, slightly dolomitic
7158	7164	6	Sandstone, very light to light-gray, very fine to fine-grained, some medium grains, (rounded to well rounded quartz), dolomitic in the lower part
<u>Knox Dolomite, 699 Feet.</u>			
7164	7174	10	Dolomite, very light to light-gray, medium to coarsely crystalline, somewhat sandy (very fine to fine); small amount of medium-gray to greenish-gray shale with very fine, disseminated pyrite
7174	7178	4	Dolomite, very light to light-gray, medium- to coarsely crystalline, argillaceous at the top, sandy at the top to somewhat sandy at the bottom (very fine to medium, well rounded), somewhat cherty with a trace of glauconite in the upper part; some light-gray to greenish-gray, pyritic shale in the upper part
7178	7180	2	Dolomite, very light to light-gray, medium to coarsely crystalline, very cherty (transparent to white), slightly sandy,

7180	7189	9	Dolomite, very light gray, fine to medium crystalline, argillaceous, sandy (very fine to fine, some medium grains); some light-gray to greenish-gray, pyritic shale with some glauconite
7189	7209	20	Dolomite, very light to light-gray, fine to medium crystalline, very sandy (very fine to fine), cherty at top to very cherty at the bottom (translucent to opaque, greenish-gray, somewhat argillaceous to greenish-gray shale)
7209	7227	18	Dolomite, very light gray, fine to medium-crystalline, somewhat sandy (fine to very fine), slightly argillaceous
7227	7241	14	Dolomite, yellowish-gray to light-gray, fine- to medium-crystalline, some very finely crystalline, shaly and sandy (very fine to fine), somewhat cherty, very sandy and somewhat shaly at the bottom
7241	7253	12	Dolomite, very light gray, medium to coarsely crystalline, somewhat shaly, somewhat sandy (fine to medium rounded); small amount greenish-gray, pyritic, glauconitic shale
7253	7269	16	Dolomite, very light gray in the upper part, light-gray in the lower part; fine- to medium-crystalline, somewhat sandy (very fine to medium-grained), somewhat cherty at the bottom
7269	7273	4	Dolomite, light gray, oolitic with interstitial chert (dolomoldie?)
7273	7283	10	Dolomite, light-gray to light olive gray, finely crystalline, silty (very fine)
7283	7285	2	Dolomite, light-gray, very cherty (white to milky, dolomitic in part); small amount of light-gray to greenish-gray, somewhat pyritic shale
7285	7287	2	Dolomite, light-gray, very cherty (highly dolomitic), scattered fine to medium sand
7287	7294	7	Dolomite, yellowish-gray to light-gray, fine to medium crystalline, somewhat cherty (dolomoldie), somewhat sandy, very fine to fine
7294	7297	3	Dolomite, very light gray to yellowish-gray, medium crystalline, somewhat sandy (fine to medium), somewhat argillaceous; small amount of medium-gray to greenish-gray shale (with very fine pyrite)
7297	7299	2	Dolomite, as above but somewhat silty instead of argillaceous
7299	7305	6	Dolomite, very light gray to yellowish-gray, medium-crystalline, cherty (translucent, a large amount is dolomoldie), somewhat sandy (fine to very fine)
7305	7315	10	Dolomite, very light gray, medium-crystalline, slightly sandy, slightly cherty at the bottom (dolomoldie); a very small amount of light-gray to greenish-gray, pyritic shale
7315	7320	5	Dolomite, very light gray, fine- to medium-crystalline very cherty, slightly sandy
7320	7326	6	As above but slightly cherty and very sandy (fine to very fine) at the top to argillaceous and somewhat sandy at the bottom, somewhat pyritic; small amount of light-gray to greenish-gray, pyritic shale
7326	7330	4	As above, somewhat sandy; trace of chert and very little argillaceous material

7330	7333	3	Dolomite, very light gray, fine- to medium-crystalline, argillaceous, somewhat sandy (fine to medium, rounded)
7333	7338	5	Dolomite, very light gray, fine- to coarse-crystalline, slightly argillaceous and slightly sandy
7338	7347	9	Dolomite, very light to light-gray, sandy in the middle part (fine to very fine); a large amount of light-gray and some medium-gray, transparent to translucent chert
7347	7352	5	Dolomite, very light gray, small amount of light-gray, fine- to coarse-crystalline, somewhat cherty (transparent to translucent, light- to dark-gray), somewhat sandy (very fine to fine rounded)
7352	7357	5	Dolomite, very light gray, somewhat sandy and somewhat cherty (dolomoidic); chert, white (opaque) to light-gray (translucent); trace of glauconite
7357	7363	6	Dolomite, very light to light-gray, finely crystalline, very cherty (highly dolomoidic), somewhat sandy (very fine to fine)
7363	7371	8	As above but more cherty and very sandy (very fine)
7371	7375	4	Dolomite, very light to light-gray, finely crystalline; very cherty (translucent to transparent with a large amount of dolomitic to lacy), sandy (very fine)
7375	7386	11	Dolomite, very light to light-gray and light olive gray, finely crystalline at the top to very finely crystalline at the bottom, very cherty at top to somewhat cherty at bottom (dolomitic to lacy), somewhat sandy (very fine to medium, rounded to well rounded); small amount of medium-gray shale in the middle
7386	7395	9	Dolomite, medium dark gray to grayish-black, finely crystalline, very highly argillaceous, slightly sandy (fine)
7395	7397	2	Dolomite, light- to medium-gray with grayish-black (shaly) streaks, finely crystalline, sandy, (very fine to medium, rounded)
7397	7402	12	Dolomite, light-gray, very fine to fine-crystalline, sandy (very fine to medium rounded)
7397	7408	11	Dolomite, light-gray, very fine to fine-crystalline, cherty (lacy, very fine), pyritic (very finely disseminated throughout), somewhat sandy (very fine to medium, rounded)
7408	7414	6	Dolomite, very light to light-gray, finely crystalline fine- to medium-crystalline in part, cherty (white, opaque, dolomoidic to lacy in part), sandy (very fine to fine)
7414	7420	6	Dolomite, light-gray to light olive gray, very fine to finely crystalline, cherty (white opaque, mostly dolomoidic to lacy)
7420	7424	4	Dolomite, very light to light-gray, finely crystalline, somewhat sandy (very fine to fine) and silty, somewhat pyritic, small amount of dolomoidic to lacy chert
7424	7426	2	Dolomite, light-gray to light brownish gray, finely crystalline, very cherty to dolomitic chert (white, dolomoidic to lacy), slightly pyritic

7426	7435	9	Dolomite, light- to medium-gray, medium to dark-gray from 7428 to 7430, light-gray in the lower part, finely crystalline, cherty (lacy, some dolomoidic at the top)
7435	7440	5	Dolomite, light-gray, finely crystalline, cherty (dolomoidic); a large amount of chert, white to light-gray; small amount of clear drusy quartz
7440	7446	6	Dolomite, yellowish-gray to light-olive gray, fine to medium-crystalline, cherty (dolomoidic to lacy), somewhat cherty at the bottom
7446	7455	9	Dolomite, medium-gray to brownish-gray, some brownish-black (very shaly), very fine to finely crystalline, cherty (dark, lacy, very fine to finely crystalline, cherty (dark, lacy, very fine), somewhat sandy (fine, rounded)
7455	7457	2	Dolomite, light-gray, some lacy chert and spongy shale residue
7457	7459	2	Dolomite (very shaly) to shale (siliceous, spongy), medium light to medium light gray dark gray
7459	7466	7	Dolomite, dark-gray to brownish-black at top, medium- to dark-gray in the middle and lower part, very fine to finely crystalline, very shaly (siliceous, spongy)
7466	7474	8	Dolomite, very light gray, some light ⁺ gray in the lower part, very fine to finely crystalline, sandy (very fine to medium rounded), silty, some lacy chert, very sandy and very silty at the top
7474	7483	9	Dolomite, light-gray to light-olive gray, finely crystalline, somewhat sandy in the upper part, silty; a moderate to large amount of lacy to spongy siliceous residue in the lower part
7483	7488	5	Dolomite, very light to light gray, finely crystalline somewhat sandy (very fine to fine) and silty, somewhat cherty (white, partly dolomoidic and lacy)
7488	7492	4	Dolomite, very light to light-gray, very fine to finely crystalline, very cherty (transparent to porcelaneous, highly dolomoidic to lacy), some clear subhedral quartz
7492	7497	5	As above, cherty (porcelaneous, highly dolomoidic to lacy, some chalcedonic)
7497	7500	3	As above, very cherty (porcelaneous to chalcedonic, much is dolomoidic to lacy), somewhat sandy (very fine to fine), slightly pyritic
7500	7504	4	As above, argillaceous, very cherty at the top to cherty at the bottom (a large amount is dolomoidic to lacy, some is chalcedonic)
7504	7509	5	Dolomite, light-gray, very fine to finely crystalline, cherty (dolomoidic to lacy, some chalcedonic), silty at the top to silty and sandy (very fine) at the bottom
7509	7513	4	Dolomite, very light to light-gray, very fine to finely crystalline, mostly fine at the top, somewhat sandy (very fine to fine), silty, small amount of lacy chert
7513	7515	2	As above but more light-gray, a large amount of the dolomite has a lacy chert residue

7515	7517	2	Dolomite, brownish-gray to dark-gray, some grayish-black, very shaly and cherty (lacy), somewhat sandy (very fine to fine), somewhat pyritic
	7531		
7517	7532	14	No sample
7531	7535	4	Dolomite, medium- to dark-gray (with brownish cast), very fine to finely crystalline, a large spongy to lacy siliceous shaly residue
7535	7560	25	No sample
7560	7568	8	Dolomite, very light gray, very fine to finely crystalline, somewhat cherty (mostly lacy), slightly argillaceous
7568	7575	7	Dolomite, light-gray, some medium-gray, finely crystalline, fine to medium in part, a moderate amount of clear (drusy) quartz, a small amount in the middle part
7575	7581	6	Dolomite, brownish-gray to dark-gray, some dark-gray to brownish-black at the top, subcrystalline to very finely crystalline, very cherty (chalcedonic to ordinary, a large amount of spongy to lacy, a little oolitic chert), somewhat cherty and somewhat sandy (very fine) at the top
7581	7585	4	Dolomite, brownish-gray to medium- and dark-gray, very finely crystalline, somewhat sandy (very fine to fine), slightly cherty
7585	7587	2	Dolomite, light brownish gray to medium-gray, some dark gray, very fine to finely crystalline, cherty (chalcedonic), somewhat sandy, (very fine to fine), some lacy argillaceous residue
7587	7596	9	Dolomite, medium light to medium dark gray, finely crystalline, argillaceous (spongy to lacy) microspecked with pyrite, somewhat silty and sandy (very fine to fine) very shaly and somewhat cherty at the top
7596	7600	4	Dolomite, light-gray, very finely crystalline, very cherty (chalcedonic, banded and drusy), some clear drusy quartz
7600	7604	4	Dolomite, light-gray, some medium-gray in the upper part, very fine to finely crystalline, cherty (porcelaneous and chalcedonic), sandy (very fine to fine)
7604	7610	6	Dolomite, light-gray, some medium- to dark-gray, light-gray to light brownish gray at the top, finely crystalline, fine to medium in part, somewhat sandy (fine to medium, rounded), somewhat cherty and shaly (spongy to lacy)
7610	7615	5	Dolomite, very light to light-gray, finely crystalline, silty, slightly sandy and shaly,
7615	7620	5	Dolomite, light-gray, some medium- to dark-gray, finely crystalline, somewhat cherty (chalcedonic), somewhat shaly (lacy)
7620	7624	4	As above, somewhat darker and argillaceous at the bottom, somewhat cherty (brownish-gray to transparent)
7624	7655	31	Dolomite, light brownish gray to medium and dark-gray, fine to very finely crystalline, highly argillaceous (spongy to lacy), somewhat silty and some very fine sand, silty and sandy (very fine to fine) at the bottom
7655	7665	8	Dolomite, light-gray, fine- to medium-crystalline, somewhat sandy (fine to very fine) and silty, slightly cherty (white to transparent), slightly argillaceous

7663	7671	8	Dolomite, light-gray to brownish-gray and some dark-gray, finely crystalline, somewhat cherty (chalcedonic), a few scattered fine sand grains
7671	7677	6 7	Dolomite, medium- to dark-gray, very fine to finely crystalline, somewhat cherty (banded, around former oolites)
7677	7679	8	Dolomite, very light to light-gray, sub-crystalline to very finely crystalline, cherty (mostly chalcedonic, some is lacy)
7679	7720	41	No sample
7720	7730	10	Dolomite, very light to light-gray, very finely crystalline, very cherty (spongy to lacy, some chalcedonic at the top) microspecked with pyrite, slightly sandy (very fine to fine)
7730	7737	7	Dolomite, light gray, very fine to medium-crystalline, sandy (very fine to medium, well rounded) somewhat cherty (dolomitic in part), slightly pyritic
7737	7742	5	Shale (slightly dolomitic) to dolomite (very shaly), light- to medium-gray, microspecked with pyrite, slightly cherty
7742	7745	3	Shale (highly dolomitic) to dolomite (very shaly), brownish-gray to brownish-black, some white chert
7745	7750	5	Dolomite, very light to light-gray, very finely crystalline, cherty (chalcedonic), silty, somewhat shaly, somewhat sandy (very fine to fine)
7750	7757	7	Dolomite, brownish-gray to brownish- and grayish-black, very finely crystalline, very shaly, somewhat cherty (chalcedonic in part), somewhat sandy (very fine to fine) to silty
7757	7760	3	^{Top RSRN?} Sandstone, light-gray, very fine grained, silty, some medium grains, dolomitic
7760	7763	3	Sandstone (highly dolomitic) and some dolomite (very sandy), very fine to medium-grained, subrounded, somewhat shaly
7763	7779	15	Sandstone, very light gray, very fine sand to coarse silt, some fine to medium grains at the top, subrounded, highly dolomitic
7779	7785	5	Sandstone (highly dolomitic) to dolomite (very sandy, very fine to silty), light-gray, slightly argillaceous
7785	7791	6	Dolomite, medium- to dark-gray, very sandy (very fine to silty), somewhat argillaceous
7791	7794	3	Dolomite, very light gray, very sandy (very fine) and very silty; some light-gray shale
7794	7796	2	Sandstone, white to light-gray, very fine to fine, subrounded, some medium grains, highly dolomitic
7796	7803	7	Chert, (highly dolomitic) to dolomite (very cherty), chalcedonic, oolitic
7803	7805	2	Dolomite, light-gray, very sandy to a dolomitic sandstone, very fine to fine, rounded
7805	7812	7	Dolomite, very light gray, fine- to medium-crystalline, somewhat silty and sandy, very fine, small amount of very fine pyrite; some medium-gray, pyritic shale
7812	7817	5	Dolomite, very light gray, finely crystalline, sandy (very fine to fine)

7812	7817	5	Dolomite, very light gray, finely crystalline, sandy (very sandy to fine)
7817	7824	7	Sandstone, very light gray, very fine, some fine grains, very silty, highly dolomitic
7824	7832	8	Sandstone, light gray with some dark gray dolomitic shale, very fine to fine grained, subrounded, some secondary crystal facets, very silty, dolomitic
7832	7837	5	Sandstone, very shaly, dolomitic) to dolomite (very sandy and shaly), medium- to dark-gray, very fine to medium-grained, subrounded to rounded
7837	7840	3	Sandstone, light-gray, very fine, very silty, highly dolomitic
7840	7847	7	Dolomite (very sandy) at top to sandstone (highly dolomitic) at the bottom, very fine to fine-grained, rounded, some medium grains
7847	7849	2	Sandstone, very light gray, very fine grained, very silty, highly dolomitic
7849	7854	5	Dolomite (very sandy) to sandstone (highly dolomitic, very fine), light-gray, very silty, somewhat argillaceous (7854-55 - depth correction)
7855	7857	2	Sandstone, very light to light-gray, very fine grained, some fine grains, rounded, very highly dolomitic
7857	7861	4	Dolomite, light-gray, some medium- to dark-gray (shaly), finely crystalline, very sandy at the top to a dolomitic sandstone (fine to very fine, rounded) at the bottom
7861	7863	2	Sandstone, very light gray, very fine to fine-grained, very silty, highly dolomitic