

10-31-51
C

Jessie Powell (9300)

Grant District, Ritchie County, W. Va.
 By Hope Natural Gas Company, Clarksburg, W. Va.
 Located 0.78 Mi. S. of 39° 15' and .45 Mi. W. of 81° 15'.
 Elizabeth Quadrangle - NE.
 Elevation 1006' L.
Permit - Ritchie 1256

Drilling commenced Oct. 1, 1948; completed May 6, 1949.
 Dry Hole.

Salt water, 5650 - 5680.

16" casing, 101' (pulled); 13", 473' (pulled); 10", 1172'; 8-1/4", 2411;
 6-5/8", 3885.

Show oil 210'; 1555'; 1800'; show gas 1866'; 1920-1933'; show oil and gas
 2316-2329'.

Show oil 2626-2636'; Gas 2725'; Oil, 2785-2790.

Show gas, 4690'.

No coal was encountered.

Section based on samples from 0 to 5810'; examined by Russell R. Flowers.

Top	Bottom	Thickness	<u>Pennsylvanian, 1430, plus, Feet</u>
0	20	20	Clay, grayish-red to grayish-brown with vari-colored limestone nodules; some light-gray to olive-gray and grayish-red limestone at the bottom
20	30	10	Shale, (silty) and siltstone to sandstone (fine), medium and medium dark gray to greenish-gray; very highly micaceous (biotite and muscovite), chloritic
30	61	31	Sandstone, very light to light-gray, fine- to medium-grained, subrounded to rounded, fine to very coarse at the bottom, calcareous, micaceous, chloritic; some light-gray to greenish-gray, very highly micaceous (biotite and muscovite), chloritic sandstone at the top; some medium-gray to dark greenish gray, highly chloritic sandstone at the bottom
61	69	8	Clay, dark greenish gray, dark-gray, some grayish-black in the lower part, light olive gray to dark greenish gray, grayish-brown to grayish-red, dark-gray to grayish-black; some limestone nodules
69	80	11	Shale (soft) and siltstone, greenish-gray to dark greenish gray (chloritic)
80	98	18	Siltstone, medium-gray to greenish-gray, chloritic, micaceous; at the bottom, sandy (very fine), highly micaceous (muscovite and biotite)
98	107	9	Sandstone, light-gray, very fine to fine-grained, mostly fine at the top, somewhat calcareous at the bottom, a little chlorite and mica
107	111	4	Clay-shale, greenish-gray to medium dark gray, silty
111	120	9	Clay, olive-gray to grayish-olive and dark greenish gray at the top to brownish-gray and very dusky red at the bottom; contains varicolored limestone nodules
120	132	12	Clay, with limestone nodules, grayish-brown to dusky-brown and some greenish-gray to olive-gray in the upper part; greenish-gray to medium dark gray (very silty), dusky-brown to very dusky red, and some olive-gray in the lower part

132	143	11	Siltstone, medium dark gray to dark greenish gray, highly micaceous, highly chloritic, some limestone nodules
143	153	10	Shale, brownish-gray to grayish-brown, silty to a medium dark and dark greenish gray siltstone
153	170	17	Siltstone, medium dark gray to dark greenish gray, highly micaceous and highly chloritic, some brownish-gray to dark-gray at the top, calcareous in part; mostly medium-gray, micaceous and chloritic siltstone to sandstone (very fine) at the bottom
170	175	5	Sandstone, light-gray to greenish-gray, very fine; some dark greenish gray siltstone
175	187	12	Siltstone and some shale, medium dark to dark-gray, some dusky yellowish brown (highly sideritic), micaceous
187	200	13	Clay, olive-gray to medium-gray and grayish-brown; some olive-gray to brownish-gray limestone; a moderate amount of siltstone to very fine sandstone at the top to a large amount at the bottom, medium- to dark-gray, micaceous and chloritic; trace of black, carbonaceous shale
200	204	4	Siltstone, dark greenish gray, highly chloritic, micaceous
204	229	25	Sandstone, light-gray, fine-grained in the upper part, fine to medium with some coarse in the lower part, some of the sand grains are chloritic rock fragments
229	234	5	Clay, gray
234	266	32	Siltstone, medium- to medium dark gray and dark greenish gray, highly chloritic, highly micaceous; sideritic in part; a large amount of medium- to dark-gray shale with sideritic specks at 251 to 255; mostly medium to medium dark gray with streaks of siderite in the lower part
266	280	14	Siltstone, dark greenish gray to medium dark gray, highly chloritic and highly micaceous; some grayish-brown to very dusky red shale
280	292	12	Siltstone, medium-gray to dark greenish gray, highly chloritic and highly micaceous (biotite and muscovite); a large amount of grayish-brown clay-shale
292	300	8	Clay, brownish-gray to dusky-brown, some medium-gray to dark-gray and olive-gray; some medium-gray to greenish-gray, very silty
300	315	15	Siltstone, medium dark gray (with some green), very highly micaceous (biotite and muscovite), chloritic; some olive-gray and brownish-gray to grayish-brown clay and clay-shale at top to a large amount at the bottom
315	325	10	Some coal to grayish-black shale in the lower part and some grayish-black and dark-gray shale in the upper part; a large amount of greenish-gray to medium- and medium dark gray sandstone (fine and very fine) to siltstone with some shale at the top to a moderate amount at the bottom; some olive-black fossiliferous shaly limestone at the top to a dark-gray to olive-gray, black, fossiliferous, calcareous shale at the bottom
325	331	6	Clay, medium- to dark-gray, with light-gray to olive-gray limestone nodules
331	336	5	Limestone, light-gray to olive-gray, very sandy to a greenish-gray, calcareous, very fine sandstone

336	342	6	Siltstone to sandstone (very fine), medium-gray to greenish-gray and dark greenish gray, micaceous and chloritic, highly calcareous in part; some brownish-gray to grayish-brown shale
342	354	12	Clay, grayish-olive to moderate yellowish brown, brownish-gray to very dusky red; contains many limestone (fossiliferous) nodules
354	370	16	Clay to shale (soft), dusky-brown to grayish-red, a large amount of moderate yellowish brown; contains limestone nodules
370	387	17	Clay-shale, medium-gray to greenish-gray, very silty, brownish-gray to very dusky red, grayish-olive brown to moderate yellowish brown (highly calcareous to shaly limestone)
387	425	38	Clay, with limestone nodules, moderate yellowish brown to brownish-gray to very dusky red
425	438	13	Clay, grayish-brown to very dusky red; a large amount of light-gray to olive-gray and some grayish-brown limestone in the lower part
438	447	9	Siltstone, medium-gray to dark greenish gray; this interval is mostly clay with limestone nodules, moderate yellowish brown to grayish-brown
447	459	12	Siltstone to sandstone (very fine), greenish-gray to dark greenish gray; some clay with limestone nodules, moderate yellowish brown to very dusky red
459	468	9	Clay and clay-shale, medium-gray to brownish-gray and very dusky red at the top to grayish-brown and very dusky red with some medium-gray and moderate yellowish brown at the bottom
468	474	6	Shale (highly calcareous) to limestone, medium-gray to greenish-gray and moderate yellowish brown, some grayish-brown to very dusky red; a moderate amount of greenish-gray, very fine, calcareous sandstone
474	485	11	Sandstone, light-gray to greenish-gray, some dark greenish gray (very silty), chloritic, some mica, calcareous
485	493	8	Siltstone and shale, medium dark gray to dark greenish gray, calcareous at the bottom
493	500	7	Limestone, light-gray to olive-gray and brownish-gray, very silty and sandy at the top
500	512	12	Sandstone, light olive gray to greenish-gray, very fine to fine-grained, highly calcareous in the upper part; a moderate to large amount of medium dark to dark-gray, silty shale; small amount of grayish-black to black, "coaly" shale
512	519	7	Siltstone and shale, medium- to dark-gray, some dusky yellowish brown (highly sideritic); a very small amount of grayish-black grayish-black to black "coaly" shale
519	528	9	Some coal to black, carbonaceous shale and some light-gray to olive-gray limestone at the top; clay, light- to medium-gray with many limestone nodules
528	535	7	Siltstone and shale to limestone, medium-gray and greenish-gray to olive-gray and dark-gray
535	558	23	Clay, grayish-brown to moderate yellowish brown, some very dusky red, contains many limestone nodules and some light- to medium-gray limestone

558	572	14	Clay and limestone, grayish-brown to reddish-gray, some very dark red, olive-gray to moderate yellowish brown, much light-gray to greenish-gray in the lower part
572	596	24	Siltstone and shale in the upper part to siltstone, shale and sandstone (very fine) in the lower part, greenish-gray to dark greenish gray, calcareous in part, chloritic, sideritic in part; some varicolored limestone and clay
596	605	9	Clay-shale, brownish-gray to dusky-brown, some medium-gray to greenish-gray at the bottom
605	612	5	Clay, moderate yellowish brown to grayish-brown and very dusky red; mostly grayish-brown to very dusky red clay with limestone nodules in the lower part
612	624	12	Clay, moderate yellowish brown to olive-gray, a large amount of light- to medium-gray and some dusky-brown at the top, a very large amount of dusky-brown to very dusky red at the bottom
624	645	21	Siltstone and shale, dark greenish gray, small amount is sideritic
645	663	18	Shale and siltstone, medium-gray to greenish-gray and dark greenish gray, sideritic and sandy in the middle part; clay and limestone, moderate yellowish brown to very dusky red, light-gray to olive-gray (cavings?)
663	680	17	Sandstone (very fine) with layers of siltstone, medium dark gray to dark greenish gray, very highly micaceous (biotite and muscovite), chloritic, calcareous, sideritic (spherulites)
680	687	7	No sample
687	692	5	Same as interval 663 to 680
692	699	7	Shale and siltstone, grayish-black, micaceous
699	713	14	Shale, black, some grayish-black to black, carbonaceous, with calcified fossils (gastropods?), some highly carbonaceous shale to coal at the bottom; some varicolored clay and limestone (cavings?)
713	729	16	Shale, medium to medium dark gray; sandstone, light gray, very fine, calcareous; some black, fossiliferous shale to coal
729	740	11	Clay, medium- to medium dark gray and dark greenish gray, sideritic (specks and spherulites), contains limestone nodules
740	750	10	Clay, greenish-gray to dark greenish gray, some very dusky red to reddish-gray, some moderate yellowish brown
750	760	10	Siltstone, greenish-gray to dark greenish gray
760	771	11	Sandstone, light-gray to greenish-gray, very fine grained, micaceous and chloritic, highly micaceous in part (much biotite), calcareous
771	776	5	Sandstone, light-gray with greenish-gray micaceous spots, fine to coarse grained, subangular to subrounded, calcareous
776	788	12	Shale and siltstone, medium dark gray to dark greenish gray

788	800	12	✓ Clay with a little limestone, varicolored with light to medium-gray predominant
800	811	11	✓ Shale and siltstone, medium dark to dark-gray; small amount is highly sideritic.
811	820	9	Sandstone, medium light to medium dark gray, very fine grained, highly micaceous (much biotite), chloritic
820	862	42	✓ Sandstone, very light to light-gray, fine- to medium-grained, subrounded to rounded, some coarse grains, ✓ micaceous and chloritic; somewhat calcareous; a large amount of medium dark to dark-gray siltstone and silty shale at the bottom
862	870	8	Limestone (argillaceous) to shale (highly calcareous), olive-gray and brownish-gray to dark-gray
870	877	7	Clay, medium to dark-gray, some light-gray
877	898	21	Shale, medium dark to dark-gray, some light-gray, sideritic in part, many scattered siderite spherulites, at the top, some dark-gray to olive-black at the bottom
898	903	5	Clay, light- to dark-gray, very dusky red to moderate yellowish brown; a large amount of medium dark to dark-gray shale; small amount of coal
903	903	5	Coal
908	940	32	Sandstone, light- to medium -gray (silty), very fine grained, micaceous and chloritic; sideritic; mostly siltstone at the top
940	946	6	✓ Sandstone, light-gray, medium-grained; a large amount of shale, dark-gray to grayish-black
946	952	6	✓ Clay-shale, light- to dark-gray, somewhat sideritic (sphaerulites); some grayish-black to black shale
952	972	20	Siltstone and shale, medium dark to dark-gray, sideritic to very highly sideritic; a large amount of grayish-black to black, highly carbonaceous shale and some dusky-brown shaly siderite at the bottom
972	986	14	Clay, medium-gray to olive-gray at the top to light-gray to grayish-black clay-shale; small amount of dusky yellowish brown, shaly siderite; small amount of coal at the top
986	1000	14	Siltstone and shale, medium- to dark-gray, micaceous, somewhat sideritic; highly sideritic and some shaly siderite at the bottom
1000	1015	15	✓ Siltstone to clay, light olive gray, highly silicified, contains many plant rhizoids rootlets; sideritic in part, a very small amount is carbonaceous at the top (Ganister)
1015	1020	5	Clay, medium- to dark gray, some dark greenish-gray
1020	1027	7	Siltstone, light- to medium-gray, very highly sideritic in part; some varicolored clay
1027	1036	9	Siltstone and shale, dark-gray, some dark-gray to olive-black
1036	1060	24	Sandstone, light- to medium light gray, mostly fine grained, subrounded to rounded, highly argillaceous, chloritic and micaceous, contains detrital rock fragments, a large amount of varicolored clay at the bottom

1060	1067	7	Siltstone, dark-gray, highly micaceous, very highly sideritic with some grayish-brown clay at the bottom
1067	1075	8	Sandstone, light-gray (with dark yellowish brown, sideritic specks and streaks), very fine grained, very silty, contains some mica and chlorite, some carbonaceous material
1075	1092	17	Clay, olive-gray to brownish-gray, silty; shale, dark-gray to grayish-black, silty; small amount of siderite at the bottom
1092	1105	13	Siltstone, dark-gray to grayish-black, shaly, micaceous, carbonaceous; some varicolored clay
1105	1115	10	Shale, dark-gray to grayish-black, small amount of siderite in the lower part
1115	1120	5	Coal to black, carbonaceous shale
1120	1126	6	Sandstone, olive-gray, highly argillaceous, very fine grained, some muscovite; small amount of coal to black shale
1126	1136	10	Siltstone, dark-gray to grayish-black (with black, carbonaceous layers)
1136	1143	7	✓ Siltstone and silty shale, light- to medium-gray, some olive-gray, sideritic (spherulites); some black "coaly" shale at the top
1143	1160	17	✓ Siltstone and shale, medium dark to dark-gray, some olive-gray to dark-gray, micaceous; some grayish-black to black, carbonaceous; small amount of siderite
1160	1164	4	✓ Sandstone (very fine) to siltstone, medium-gray, very shaly, much carbonaceous material, highly sideritic, micaceous
1164	1170	6	Siltstone and shale, dark-gray to olive-black, some dark-gray to grayish-black, small amount is highly sideritic; small amount of black "coaly" shale
1170	1194	24	Sandstone, medium light gray at the top to light-gray at the bottom, very fine to fine-grained, argillaceous, micaceous and chloritic, some carbonaceous material at the top, somewhat sideritic
1194	1212	18	Sandstone, very light gray and medium-grained at the top to light brownish gray and fine-grained at the bottom
1212	1231	19	✓ Sandstone, light-gray with some dark-gray (shaly) and dark-gray shale in the upper part, very fine to fine-grained, some medium grains, sideritic; some grayish-black to black shale with carbonaceous streaks in the lower part
1231	1240	9	Shale, dark-gray to grayish-black, some grayish-black to black (carbonaceous); small amount of dusky-brown siderite
1240	1252	12	Siltstone, medium dark to dark-gray with black carbonaceous streaks, shaly, micaceous
1252	1318	66	Sandstone, light-gray, very fine to fine-grained, fine- to medium-grained (subrounded) in the lower part, argillaceous; a large amount of dark-gray siltstone with black carbonaceous streaks at the top; small amount of siderite at the bottom

1318	1323	5	Shale, (very silty) to siltstone (very shaly), dark-gray, micaceous, sideritic
1323	1348	25	Sandstone, light-gray, some light brownish gray (sideritic), fine to medium-grained, subrounded, fine to very fine at the bottom, argillaceous; shale, dark-gray to grayish-black, a large amount at the top to some at the bottom; small amount of siderite
1348	1353	5	Shale, dark-gray
1353	1373	20	Sandstone, very light to light-gray, fine- to medium-grained, subrounded
1373	1380	7	Shale, dark-gray to grayish-black; small amount of medium dark gray siltstone; small amount of dusky-brown siderite
1380	1403	23	Shale, dark-gray to grayish-black, interlayered with light- to medium-gray siltstone to very fine sandstone, mostly shale at top and sandstone at the bottom; small amount is sideritic
1403	1418	15	Sandstone, light- to medium light gray, very fine to medium-grained, some coarse grains at the bottom, highly argillaceous, a few breaks of dark-gray to grayish-black shale
1418	1430	12	Sandstone, very light gray, medium- to coarse-grained, some very fine grains
<u>Greenbrier Limestone, 70 Feet.</u>			
1430	1447	17	Limestone, light olive gray to olive-gray; small amount of medium dark gray to dark greenish gray shale with tiny dusky brown siderite spherulites (Mauch Chunk horizon?); some spherulites in the limestone
1447	1452	5	Limestone, moderate yellowish brown to olive-gray, slightly sandy (fine to medium, well rounded); some dark greenish gray shale, very sandy in part
1452	1462	10	Limestone, light-gray to light olive gray, mostly oolitic at the top to very sandy at the bottom (very fine to fine, rounded)
1462	1467	5	Sandstone (highly calcareous) to limestone (very sandy), white to very light gray, very fine to fine grained, rounded, some medium grains
1467	1482	15	Limestone, light olive gray to light brownish gray, very light gray at the bottom, oolitic
1482	1490	8	Limestone, very light to light-gray, very sandy (very fine), very silty
1490	1496	6	Limestone, light olive gray, very sandy and very silty; some light-gray, highly calcareous, very fine to medium grained sandstone in the lower part; some medium-gray shale
1496	1500	4	Limestone, light olive gray, highly oolitic; silty to a medium light gray, highly calcareous siltstone, somewhat sandy (very fine to coarse) some medium-gray shale
<u>Pocono Formation, 590 Feet.</u>			
1500	1507	7	Shale and some siltstone, greenish-gray to medium-gray, speckled with siderite spherulites; some dark-gray to grayish-black shale

1507	1530	23	Siltstone to sandstone (very fine), greenish-gray to medium-gray, somewhat sideritic
1530	1558	28	✓ Sandstone, very light gray, some light-gray, fine-grained, slightly calcareous; some greenish-gray siltstone and shale at 1435 to 1443
1558	1573	15	✓ Siltstone, light-gray to light brownish gray and greenish-gray, very fine to medium-grained, somewhat calcareous
1573	1600	27	Siltstone to sandstone (very fine), medium-gray, some coarse sand grains; small amount of dark-gray, silty shale
1600	1612	12	Sandstone, very light to medium-gray, very fine to coarse-grained, subangular to subrounded, silty, slightly calcareous
1612	1628	16	✓ Sandstone, light-gray, fine-grained with a little siderite at the top to light-gray and light-brownish gray (somewhat sideritic), very fine to medium-grained sandstone in the middle part; in the lower part sandstone, light brownish gray, very fine to fine-grained, highly sideritic; some dark-gray siltstone and shale and a little siderite in the middle part
1628	1695	67	Shale, dark-gray, some olive-black to dusky yellowish brown (highly sideritic); some medium dark to dark gray siltstone
1695	1743	48	Shale, dark-gray; siltstone, medium- to medium dark gray; small amount of dark to dusky yellowish brown, highly sideritic shale and siltstone
1743	1784	41	Shale, dark-gray, some dusky yellowish brown (highly sideritic), silty; some medium dark gray siltstone
1784	2006	222	Siltstone and shale, medium dark to dark-gray, many of the samples contain small amounts of dusky yellowish brown (highly sideritic), small amount of dark-gray to grayish-black from 1980 to 2006
2006	2022	16	Shale, dark-gray with some grayish-black at the top to dark-gray and grayish-black at the bottom
2022	2036	14	Shale, dark-gray to grayish-black, some dark-gray (Sunbury shale); contains a trace of light-gray, pyritic; very fine sandstone to siltstone at the bottom (Berea horizon?)
<u>Devonian Shales, 3424 Feet.</u>			
2036	2090	54	Siltstone and shale, medium- to dark-gray
2090	5401	3311	Not described
5401	5460	59	Shale, black, some brownish-black, very highly carbonaceous; pyritic in part, very highly calcareous at the bottom
<u>Huntersville Chert, 194 Feet.</u>			
5460	5463	3	Shale and siltstone, brownish-gray, very highly micaceous (metabentonite); limestone, brownish-black, shaly
5463	5469	6	Limestone, brownish-gray to brownish-black, very shaly, cherty in the lower part
5469	5474	5	Limestone, brownish-gray with some light-gray, shaly, cherty

5474	5478	4	✓ Chert, very light gray (chalcedonic) to a brownish-gray, somewhat shaly, cherty limestone
5478	5486	8	Limestone, brownish-gray, some brownish-black in the lower part, shaly, very cherty to a light-gray chert (translucent)
5486	5495	9	✓ Limestone, brownish-gray, very cherty to a light-gray, calcareous chert (mostly chalcedonic); some brownish-black, very shaly limestone at the bottom
5495	5505	10	Chert (calcareous) with some limestone, light-gray to brownish-gray; the chert is transparent to translucent
5505	5512	7	Limestone, brownish-gray, some brownish-black, shaly; chert, brownish-gray (calcareous) to light-gray (mostly chalcedonic); a large amount of brownish-black to black, calcareous shale at the bottom
5512	5521	9	Chert, light- to medium-gray and brownish-gray (highly calcareous), shaly; some brownish-black to black, shaly limestone to calcareous shale in the lower part
5521	5530	9	✓ Chert to silicified shale, medium- to dark-gray with light-gray spots, very highly calcareous
5530	5539	9	Chert (calcareous, argillaceous) to shale (silicified), highly calcareous to limestone (very shaly), medium-gray to brownish-gray, some brownish-black, dolomitic at the top
5539	5543	4	Chert, white to light-gray, chalcedonic; chert (calcareous) to limestone (shaly), light-gray to brownish-gray, some brownish-black, generally darker at the bottom
5543	5574	31	Limestone, brownish-gray, some light-gray, very shaly, very cherty to calcareous chert, somewhat dolomitic, mostly chert at 5554 to 5555
5574	5609	35	Chert (highly calcareous) with some limestone (silicified), medium-gray to brownish-gray and brownish-black, shaly in part, somewhat dolomitic
5609	5613	4	Siltstone to silicified limestone, medium-gray to brownish-gray and dark-gray, glauconitic; shaly in part; some milky to transparent chert; a large amount of ordinary chert at the bottom
5613	5654	41	Chert (calcareous) and some limestone (silicified), shaly, medium-gray to brownish-gray, some brownish-black, slightly dolomitic; a large amount of brownish-black (shaly) at 5619 to 5622, somewhat sandy (fine to medium) and silty and glauconitic at the bottom
5654	<u>Oriskany Sandstone, 105 Feet.</u>		
5654	5664	10	Sandstone, light-gray, fine- to medium-grained quartz (milky to transparent), rounded, some coarse grains, somewhat calcareous, a large amount of black interstitial material ("dead" oil?)
5664	5686	22	✓ Sandstone, light-gray (with black interstitial material) at the top to very light gray, very fine to fine-grained, subrounded, some medium grains, mostly fine-grained from 5673 to 5676, fine- to coarse-grained at the bottom, somewhat calcareous

5686	5740	54	Sandstone, very-light to light-gray, very fine to fine-grained, subrounded, contains some black interstitial material, somewhat calcareous, some medium grains at 5707 to 5709, mostly fine-grained at 5709 to 5714, highly calcareous at 5722, mostly fine-grained at 5729 to 5730, fine- to coarse-grained at 5737 to 5740
5740	5743	3	✓ Sandstone, light-gray, very fine grained, some fine grains, calcareous
5743	5746	3	Sandstone, light-gray, very fine grained at the top to fine-grained at the bottom, highly calcareous, some dark-gray (silty and shaly) at the bottom
5746	5753	7	✓ Sandstone, light-gray, very fine to medium-grained, somewhat calcareous, contains a small amount of dark (shaly) material, very light gray and fine- to medium-grained at the top
5753	5759	6	Sandstone, light-gray, very fine to fine-grained, calcareous, some dark (shaly) material
<u>Helderberg Formation, 51, plus) Feet.</u>			
5759	5763	4	Sandstone, light- to medium-gray, some dark-gray (very shaly), very fine grained, highly calcareous
5763	5770	7	✓ Sandstone (highly calcareous) to limestone (very sandy, very shaly) to calcareous shale, light-to dark-gray, somewhat cherty
5770	5773	3	Limestone (sandy and shaly silty) to a highly calcareous shale, dark-gray to grayish-black, with some light-to medium-gray, very cherty
5773	5778	5	Siltstone and chert (calcareous) to limestone and calcareous shale, light-gray to brownish-gray, some dark-gray to grayish-black
5778	5783	5	Sandstone, medium-gray to brownish-gray, some dark-gray (very shaly) at the top, very fine grained, some fine to medium grains, very fine to medium-grained at the bottom, highly calcareous, very silty
5783	5787	4	Limestone, dark-gray and brownish-gray to brownish-black, some light-gray, very sandy (very fine to fine), silty
5787	5796	9	Limestone (very sandy) to sandstone (very fine to fine, highly calcareous), medium-gray to brownish-gray, with light-gray spots, some grayish-black (shaly)
5796	5802	6	Limestone, medium- to dark-gray, some light-gray, very silty and cherty to calcareous chert, shaly; some grayish-black, calcareous shale
5802	5807	5	✓ Chert (calcareous) to shale (highly silicified, very silty and highly calcareous), light- to medium-gray; some dark-gray to grayish-black, calcareous shale
5807	5810	3	Chert (calcareous) to shale (highly silicified and highly calcareous), light- to dark-gray, silty
	5810		TOTAL DEPTH