

J-12-52
C

J. Paul Martin No. 9331 Well.

Portland District, Preston County, W. Va.
By Hope Natural Gas Co., 445 W. Main Street, Clarksburg, W. Va.
Located 5.58 mi. S of 39° 30' and 4.05 mi. W. of 79° 30'.
Kingwood Quadrangle - NE
Elevation 1898' L.
Permit - 10

Drilling commenced Feb. 16, 1949; completed June 21, 1949.
Shot June 20, 1949 at 5171-5203 and 5281-5331; with 90 and 100 quarts.
Gas well; volume 2,071,000 cu. ft.
Rock pressure, 2140 pounds in 24 hours.
18" casing, 14', 11", 319'; 9", 1491'; 7", 4905'; all left in.
Gas at 4926, 4942, 4961, 4964, 5014, 5115'; Oriskany gas at 5173, 5174,
5178, 5180, 5183, 5198, 5285
836 M. before shot.
Section based on samples from 3996 to 5360; examined by Russell R. Flowers.

Marrell Shale, 107' Feet.

3996 4103 107 Shale, grayish-black (somewhat carbonaceous), some grayish-black to black (carbonaceous) at the bottom

Tully Limestone, 17 Feet.

4103 4120 17 Limestone, dark-gray to olive-black, argillaceous, pyritic in part; a large amount of grayish-black to black shale, highly calcareous in part (avings?)
Hamilton and Marcellus Shales, 758 Feet.

4120 4164 44 Shale, dark-gray to grayish-black, highly calcareous in the upper part

4164 4485 321 Shale, dark gray to grayish-black, some grayish-black to black (carbonaceous), small amount is highly calcareous

4485 4550 65 Shale, dark-gray, somewhat calcareous and dolomitic

4550 4765 215 Shale, dark-gray to grayish-black, some grayish-black to black (carbonaceous); small amount is calcareous

4765 4789 24 Shale, medium dark gray, calcareous, somewhat dolomitic

4789 4878 89 Shale, grayish-black, somewhat carbonaceous, calcareous, slightly pyritic; small amount of shale is slickensided; small amount of calcite; small amount of brownish-black, pyritic metabentonite at the bottom

Onondaga Group, 293 Feet.

4878 4898 20 Shale, dark-gray to grayish-black, highly calcareous to a very shaly limestone (predominant in the lower part); some dark yellowish-brown to brownish-black metabentonite at the top

4898 4903 5 Shale (highly calcareous) to limestone (very shaly), dark-gray to grayish-black, very cherty

4903 4914 11 Chert, medium- to dark-gray, argillaceous, calcareous

4914 4933 19 Chert, light-gray, some medium- to dark-gray (argillaceous), translucent, somewhat calcareous and dolomitic

4933	4964	11	Chert, light-gray (transparent to translucent) mottled with dark-gray to grayish-black (highly argillaceous), spicular, slightly dolomitic
4964	4953	9	Chert, light- to medium-gray (translucent, spicular) mottled with dark-gray to grayish-black (argillaceous), slightly dolomitic
4953	4964	11	Chert, light- to dark-gray (argillaceous), silty, with some siltstone, slightly dolomitic, small amount is glauconitic
4964	4970	6	Chert, medium to medium dark gray (ordinary) mottled with dark-gray to grayish-black (highly argillaceous), slightly dolomitic
4970	4983	13	Chert (medium- to dark-gray) to silicified, silty shale (grayish-black)
4983	4999	16	Chert, medium-gray (silty in part), some dark-gray to grayish-black (argillaceous to silicified shale), slightly dolomitic
4999	5014	15	Shale, grayish-black, silty, calcareous; a large amount of light- to dark-gray chert at the bottom
5014	5019	5	Chert, light- to medium-gray mottled with grayish-black, silicified shale, somewhat calcareous and dolomitic
5019	5023	4	Chert, light- to medium-gray mottled with dark-gray to grayish-black (argillaceous), somewhat calcareous and dolomitic
5023	5034	11	Chert, light- to medium-gray (translucent, somewhat spicular), some dark-gray to grayish-black (argillaceous), slightly calcareous, slightly dolomitic
5034	5044	10	Chert, light- to medium-gray (translucent to opaque, somewhat spicular) mottled with some dark-gray to grayish-black (argillaceous), silty in part , slightly dolomitic
5044	5055	11	Chert, light-gray (translucent, spicular) mottled with grayish-black (argillaceous), silty in part , slightly dolomitic
5055	5070	15	Chert, light- to medium-gray, mottled with dark-gray to grayish-black (highly argillaceous); trace of dolomite
5070	5077	7	Chert, light- to dark-gray, some dark-gray to grayish-black (argillaceous), very silty, slightly dolomitic; trace of glauconite
5077	5097	20	Chert, medium- to dark-gray, a moderate to large amount of grayish-black (highly argillaceous), silty at the bottom; trace of dolomite
5097	5107	10	Chert (medium dark gray) to silicified shale (grayish-black; trace of dolomite)
5107	5126	19	Chert, medium to dark-gray; some grayish-black, silicified shale
5126	5143	17	Chert, medium dark gray to shale, grayish-black (silicified)
5143	5162	19	Shale, grayish-black, silicified
5162	5171	9	Shale, grayish-black

Ridgely Sandstone, 51 Feet.

(Top 15 feet like subsurface Oriskany in the Charleston Area)

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| 5171 | 5181 | 10 | Sandstone, very light to light-gray, fine to medium grained, subrounded to rounded, some coarse grains, quartzose, contains small amounts of dark interstitial material, calcareous (cement) |
| 5181 | 5186 | 5 | Sandstone, light-gray, fine-grained, some medium grains, subrounded to rounded, very fine to fine-grained at the top, calcareous (cement) |
| 5186 | 5198 | 12 | Sandstone, light-gray (some medium- to dark-gray, argillaceous streaks at the top), very fine to medium-grained, some coarse grains at the top, angular to subrounded, some rounded grains, very highly calcareous |
| 5198 | 5209 | 11 | Sandstone, medium-gray with light-gray spots, very fine to fine-grained, some medium-gray, subangular to subrounded, very fine at the top and bottom, silty, very highly calcareous, contains some interstitial (shaly) material |
| 5209 | 5215 | 6 | Sandstone (highly calcareous) to limestone (very sandy), medium- to dark-gray, very fine to fine-grained, some medium to coarse grains, silty, subangular to subrounded, somewhat cherty; some grayish-black shale |
| 5215 | 5223 | 8 | Sandstone, light- to medium-gray, very fine to medium-grained, subangular to subrounded, some coarse grains, silty, very highly calcareous, somewhat argillaceous |
| 5223 | 5229 | 6 | Sandstone, very light to light-gray, very fine to medium-grained, subangular to subrounded, some coarse (rounded) grains, silty, highly calcareous |
| 5229 | 5232 | 3 | Sandstone, light-gray, as above, but more calcareous at the top |
| <u>Holderberg Group, 128, plus, Feet.</u> | | | |
| 5232 | 5235 | 3 | Sandstone, medium-gray, some dark-gray (argillaceous streaks), very fine grained, very silty, some fine to medium grains (subrounded to rounded), very highly calcareous |
| 5235 | 5244 | 9 | Sandstone, medium-gray to dark-gray (argillaceous), very fine grained, very silty, many fine to coarse (rounded) sand grains, very highly calcareous |
| 5244 | 5257 | 13 | Sandstone, medium-gray to grayish-black, very fine grained, silty, some fine to coarse grains, highly argillaceous, very highly calcareous to limestone (sandy); some very fine to medium-grained, light-gray sandstone at the bottom |
| 5257 | 5267 | 10 | Sandstone, light- to medium-gray with some dark-gray (shaly) streaks, very fine to fine-grained, contains many fine to medium (rounded) grains, very highly calcareous |
| 5267 | 5272 | 5 | Sandstone, light- to medium-gray, very highly calcareous with limestone spots, very fine to fine-grained, many fine to medium and some coarse, rounded grains, somewhat argillaceous; trace of chert (lacy) |
| 5272 | 5281 | 9 | Sandstone (very fine, highly calcareous) to limestone (very sandy), dark-gray to grayish-black (highly argillaceous) in the upper part, light- to dark-gray (somewhat argillaceous) in the lower part, some fine to coarse sand grains |

5281	5286	5	Sandstone, light- to medium-gray at the top, light-gray in the middle and lower parts, fine-grained, subangular to subrounded, some medium (rounded) grains, some very fine grains, very highly calcareous
5286	5291	5	Sandstone (very fine, highly calcareous) to limestone (very sandy), light- to medium-gray, some dark-gray, (argillaceous), some fine to medium grains (rounded)
5291	5297	6	Sandstone, (very fine, very highly calcareous) to limestone (very sandy), medium- to dark-gray (argillaceous), ^{some grayish-black (argillaceous)} at the top, very silty, some fine to medium (rounded) sandstone
5297	5305	8	Sandstone, very light to light-gray with some dark-gray to grayish-black (argillaceous) streaks, fine- to medium-grained, some coarse grains at the top, subangular to rounded, highly calcareous, very highly calcareous at the bottom
5305	5308	3	Sandstone, light-gray, very fine to fine-grained at the top to fine-grained at the bottom, very highly calcareous
5308	5331	23	Sandstone, (very fine, very silty, highly calcareous) to limestone (very sandy to siltstone), medium- to dark-gray, with grayish-black (argillaceous) streaks in upper part and light-gray (limestone) spots, somewhat cherty
5331	5343	12	Limestone (very sandy) to sandstone (very fine, highly calcareous), medium-gray, some dark-gray (argillaceous), some slightly cherty, some fine to medium (rounded) grains at the bottom
5343	5360	17	Limestone, medium- to dark-gray with light-gray spots, very sandy to a highly calcareous sandstone, very fine to fine grained, some medium grains, very fine to medium-grained at the bottom, contains some argillaceous material
5360			TOTAL DEPTH