



STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION

Quadrangle Kingwood

Permit No. Pres - 7 - Redrill

W PECORD

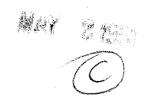
Oil or Gas Well Gas-Redrill

| | 47 | aheard Corne | 1.1 | *** | | | |
|---|--|---|---|--|---|--|---|
| CompanyA | ttantic Se | aboard 50100 | ration | Casing and | Used in | Left in | |
| | | | on, W.Va. | Tubing | Drilling | Well | Packers |
| | | tin | | - | | | |
| | | ck Creek | | Size | | | V |
| | | | | 16 | | | Kind of Packer |
| | | CountyPre | | _ 13 | | | |
| The surface of the | ract is owned in | n fee by <u>J. Pa</u> | ul Martin | 10 | | | Size of |
| | | Address Newar | | 8¼ | | 10001 | |
| Mineral rights a | | J. Paul M Address Newar | | 7"3 <u>% 23#</u> | 47991 | <u> 4799'</u> | Depth set |
| | | | . K, OHIO | 5 3/16 | # 54721 | 54721 | |
| | | | | | 7412 | 2412 | Perf. top |
| - - | | | 'o | | | | Perf. bottom |
| | | | 0 | | | | Perf. top |
| | | | Inch | | | | Perf. bottom |
| | | | Incl | | · | | |
| | | | M_Cu. Ft | CASING CEM | | SIZE | No. FtDa |
| | | lbs | | S | ee below | | |
| | | | bbls., 1st 24 hrs | • | NCOUNTERED | AT_None | FEETINCHE |
| | | | , | | TINC | HES | FEETINCHE |
| · · · · · · · · · · · · · · · · · · · | | | | | | | FEETINCHE |
| WELL FRACTU | JRED | | | | | | |
| | | | | | | | |
| RESULT AFTE | R TREATMEN | T See b | elow | | | | |
| ROCK PRESSI | RE AFTER TI | REATMENT | See belo | W | | | |
| NOON INDEED | | | | | | | |
| | | Feet | | Salt Water | | Fee | t |
| | | Feet Hard or Soft | Тор | Salt WaterBottom | Oil, Gas or Water | Depth | Remarks |
| Fresh Water | | Hard or | Тор | Bottom | Oil, Gas | T | |
| Fresh Water | | Hard or | тор 5234' | Bottom 5402 1 | Oil, Gas | T | |
| Formation Chert | | Hard or | Тор | Bottom | Oil, Gas | T | |
| Formation Chert Shale Oriskany | Color | Hard or Soft | Top 5234' 5402' 5418' | 5402 ' 5418 ' 54651 | Oil, Gas or Water | Depth | Remarks |
| Formation Chert Shale Oriskany | Color | Hard or Soft | Top 5234' 5402' 5418' | Bottom 5402' 5418' 54651 | Oil, Gas or Water | Depth | |
| Formation Chert Shale Oriskany Well ASC | Color X-76-7387 | Hard or Soft | Top 5234' 5402' 5418' pe 9208) was | Bottom 5402' 5418' 54651 | Oil, Gas or Water Gas with rotary | Depth | Remarks |
| Formation Chert Shale Oriskany Well ASC total dep | Color X-76-7387 th and was | Hard or Soft (formerly Ho | Top 5234' 5402' 5418' pe 9208) was s a storage | Bottom 5402: 5465: 5465: drilled out gas injection | Oil, Gas or Water Gas with rotary and withdr | Depth using mu | Remarks |
| Formation Chert Shale Oriskany Well ASC total dep casing wa | Color F-76-7387 th and was | Hard or Soft (formerly Ho | Top 5234' 5402' 5418' pe 9208) was s a storage cks of 4% ge. | Bottom 5402: 5465: 5465: drilled out gas injection | Oil, Gas or Water Gas with rotary and withdr | Depth using mu | Remarks ed to original The 7" 23# |
| Fresh Water Formation Chert Shale Oriskany Well ASC total dep casing wa a caving Following | Color K-76-7387 th and was s cemented and loss coredrilling | Hard or Soft (formerly Hopomorpheted as with 300 sadirculation controls to the original soft) | Top 5234' 5402' 5418' pe 9208) was s a storage cks of 4% genondition. ginal total of | Bottom 5402' 5418' 54651 drilled out gas injection cement. To | Oil, Gas or Water Gas with rotary and withdrais string o | Depth using mu awal well casing ing was r | Remarks d to original The 7" 23# was run to contr un and cemented |
| Fresh Water Formation Chert Shale Oriskany Well ASC total dep casing wa a caving Following with 110 | Color K-76-7387 th and was s cemented and loss creditling sacks of Lagrangian | Hard or Soft (formerly Hocompleted as with 300 sacirculation constitution of the the originates cement. | Top 5234' 5402' 5418' pe 9208) was s a storage cks of 4% general total of the figure case | Bottom 5402' 5418' 54651 drilled out gas injection cement. To | Gas with rotary and withdr his string of | Depth using mu awal well casing ing was r capsule j | Remarks d to original The 7" 23# was run to contr un and cemented ets from |
| Fresh Water Formation Chert Shale Oriskany Well ASC total dep casing wa a caving Following with 110 5421' - 5 | Color X-76-7387 th and was s cemented and loss credrilling sacks of Lagrangian with 1 | Hard or Soft (formerly Hocompleted as with 300 sadirculation control of the originate coment. | Top 5234' 5402' 5418' pe 9208) was s a storage cks of 4% generation. ginal total of The 4½" cas: | Bottom 5402: 5418: 5465: drilled out gas injection cement. In lepth the 4½: ing was perforating, | Gas Gas with rotary and withdr his string of 1, 12.6# cas brated with there was a | Depth using mu awal well f casing ing was r capsule j show of g | Remarks Ind to original The 7" 23# was run to control un and cemented ets from as. Following |
| Fresh Water Formation Chert Shale Oriskany Well ASC total dep casing wa a caving Following with 110 5421: - 5 acidizati | Color K-76-7387 th and was s cemented and loss credrilling sacks of Land to the color with 500 credrings and the color with 500 credrings and the color with 500 credrings are color with 50 | Hard or Soft (formerly Hope completed as with 300 sadirculation constitution of the the originates cement. If shots/ft.) (gallons much soft.) | Top 5234' 5402' 5418' pe 9208) was s a storage cks of 4% general total of the 4½" cas: Following per cleanout acceptance of the content of | Bottom 5402' 5418' 54651 drilled out gas injection cement. The light of the light of the light of the certon o | Gas with rotary and withdress string of the case orated with there was a flow was 2 | Depth using mu ewal well casing ing was r capsule j show of g | Remarks d to original The 7" 23# was run to contr un and cemented ets from as. Following Following 4000 |
| Fresh Water Formation Chert Shale Oriskany Well ASC total dep casing wa a caving Following with 110 5421' - 5 acidizati gallons H | Color F-76-7387 th and was s cemented and loss credrilling sacks of Lacks of Lacks on with 500 CL acid, or | Hard or Soft (formerly Hope completed as with 300 satisficulation of the originates cement. A shots/ft. O gallons much pen flow was | Top 5234' 5402' 5418' pe 9208) was s a storage cks of 1% genormal total of The 4½" cast Following periodic cleanout act 2,250 MCF. | Bottom 5402' 5418' 54651 drilled out gas injection cement. The light of the light of the light of the certon o | Gas with rotary and withdress string of the case orated with there was a flow was 2 | Depth using mu ewal well casing ing was r capsule j show of g | Remarks Ind to original The 7" 23# was run to contr un and cemented ets from as. Following |
| Fresh Water Formation Chert Shale Oriskany Well ASC total dep casing wa a caving Following with 110 5421' - 5 acidizati gallons H HCL Acid, | Color F-76-7387 th and was s cemented and loss credrilling sacks of Lacks of Lacks on with 500 CL acid, or open flow | Hard or Soft (formerly Hope completed as with 300 satisficulation of the originates cement. A shots/ft. O gallons much pen flow was 5,635 Mc | Top 5234' 5402' 5418' pe 9208) was s a storage cks of 4% genormal total of The 4½" cast Following periodic cleanout act 2,250 MCF. | Bottom 5402' 5418' 54651 drilled out gas injection cement. To depth the 4½ ing was perforating, to | Gas with rotary and withdr his string of rated with there was a a flow was 2 anal acid jo | Depth using mu ewal well casing ing was r capsule j show of g | Remarks d to original The 7" 23# was run to control un and cemented ets from as. Following Following 4000 |
| Fresh Water Formation Chert Shale Oriskany Well ASC total dep casing wa a caving Following with 110 5421' - 5 acidizati gallons H HCL Acid, | Color F-76-7387 th and was s cemented and loss credrilling sacks of Lacks of Lacks on with 500 CL acid, or open flow | Hard or Soft (formerly Hope completed as with 300 satisficulation of the originates cement. A shots/ft. O gallons much pen flow was 5,635 Mc | Top 5234' 5402' 5418' pe 9208) was s a storage cks of 4% genormal total of The 4½" cast Following periodic cleanout act 2,250 MCF. | Bottom 5402' 5418' 54651 drilled out gas injection cement. The light of the light of the light of the certon o | Gas with rotary and withdr his string of rated with there was a a flow was 2 anal acid jo | Depth using mu awal well f casing ing was r capsule j show of g 31 MCF. | Remarks Ind to original The 7" 23# was run to control un and cemented ets from as. Following Following 1,000 0 gallons of |
| Fresh Water Formation Chert Shale Oriskany Well ASC total dep casing wa a caving Following with 110 5421' - 5 acidizati gallons H HCL Acid, | Color F-76-7387 th and was s cemented and loss credrilling sacks of Lacks of Lacks on with 500 CL acid, or open flow | Hard or Soft (formerly Hope completed as with 300 satisficulation of the originates cement. A shots/ft. O gallons much pen flow was 5,635 Mc | Top 5234' 5402' 5418' pe 9208) was s a storage cks of 4% genormal total of The 4½" cast Following periodic cleanout act 2,250 MCF. | Bottom 5402' 5418' 54651 drilled out gas injection cement. To depth the 4½ ing was perforating, to | Gas with rotary and withdr his string of rated with there was a a flow was 2 anal acid jo | Depth using mu awal well f casing ing was r capsule j show of g 31 MCF. | Remarks d to original The 7" 23# was run to contr un and cemented ets from as. Following Following 4000 |
| Fresh Water Formation Chert Shale Oriskany Well ASC total dep casing wa a caving Following with 110 5421' - 5 acidizati gallons H HCL Acid, | Color F-76-7387 th and was s cemented and loss credrilling sacks of Lacks of Lacks on with 500 CL acid, or open flow | Hard or Soft (formerly Hope completed as with 300 satisficulation of the originates cement. A shots/ft. O gallons much pen flow was 5,635 Mc | Top 5234' 5402' 5418' pe 9208) was s a storage cks of 4% genormal total of The 4½" cast Following periodic cleanout act 2,250 MCF. | Bottom 5402' 5418' 54651 drilled out gas injection cement. To depth the 4½ ing was perforating, to | Gas with rotary and withdr his string of rated with there was a a flow was 2 anal acid jo | Depth using mu awal well f casing ing was r capsule j show of g 31 MCF. | Remarks Ind to original The 7" 23# was run to control un and cemented ets from as. Following Following 1,000 0 gallons of |
| Fresh Water Formation Chert Shale Oriskany Well ASC total dep casing wa a caving Following with 110 5421' - 5 acidizati gallons H HCL Acid, | Color F-76-7387 th and was s cemented and loss credrilling sacks of Lacks of Lacks on with 500 CL acid, or open flow | Hard or Soft (formerly Hope completed as with 300 satisficulation of the originates cement. A shots/ft. O gallons much pen flow was 5,635 Mc | Top 5234' 5402' 5418' pe 9208) was s a storage cks of 4% genormal total of The 4½" cast Following periodic cleanout act 2,250 MCF. | Bottom 5402' 5418' 54651 drilled out gas injection cement. To depth the 4½ ing was perforating, to | Gas with rotary and withdr his string of rated with there was a a flow was 2 anal acid jo | Depth using mu awal well casing ing was r capsule j show of g 31 MCF. | Remarks In to original The 7" 23# was run to control un and cemented ets from as. Following Following 1,000 O gallons of |
| Fresh Water Formation Chert Shale Oriskany Well ASC total dep casing wa a caving Following With 110 5421' - 5 acidizati gallons H HCL Acid, | Color F-76-7387 th and was s cemented and loss credrilling sacks of Lacks of Lacks on with 500 CL acid, or open flow | Hard or Soft (formerly Hope completed as with 300 satisficulation of the originates cement. A shots/ft. O gallons much pen flow was 5,635 Mc | Top 5234' 5402' 5418' pe 9208) was s a storage cks of 4% genormal total of The 4½" cast Following periodic cleanout act 2,250 MCF. | Bottom 5402' 5418' 54651 drilled out gas injection cement. To depth the 4½ ing was perforating, to | Gas with rotary and withdr his string of rated with there was a a flow was 2 anal acid jo | Depth using mu awal well casing ing was r capsule j show of g 31 MCF. | Remarks Ind to original The 7" 23# was run to contr un and cemented ets from as. Following Following 4000 O gallons of |

WEST VIRGINIA DEPARTMENT OF MINES OIL & GAS DIVISION WELL RECORD

| Permit No. Pres 7 Kingwood Quad. | | | Gas Well CASING & TUBING | |
|----------------------------------|----------------------|----------------------------|---|------------|
| Company | Hone Na | tural Gas Company | | |
| Address | | Main St., Clarksburg, W.Va | • 16 $19\frac{1}{2}$ $19\frac{1}{2}$ | |
| Farm | | Martin Acres 121 | 11 331 331 | |
| Location | | | 9 1588 1588 | |
| Well No. | 9208 E | lev. 1934 | 7 5085 5085 | |
| District | Portland | | | |
| Surface | | Martin, Terra Alta, W.Va. | Casing cemented: | |
| Mineral | | • | 7" 300° When run | |
| Commenced | March 2' | 7,1948 | Cemented from 4785 | t o |
| Completed | Sept. 2 | | 5085 | |
| Not shot | - | • | | |
| Open flow | 24/10th | s M in 5" | No coal recorded | |
| Volume | 4762 MC | F . | | |
| Rock Pressure | 2090 lb | s. 45 hrs. | | |
| Fresh Water | 45° H.F. | .; 340° 3 blrs. hr. | | |
| Salt Water | None re | corded | | |
| Gurana I | 0 | 99 | | |
| Gravel | 0 2 2 | 22 237 | | |
| Lime Slate | 22 237 | 275 | | |
| Lime | 275 | 300 | | |
| \$late | 300 | 305 | | |
| Lime | 305 305 | 540 | | |
| Shale | 540 | 965 | | |
| Lime | 965 | 1040 | | |
| Shale | 1040 | 1155 | | |
| Lime | 1155 | 1209 | | |
| Benson | 1209 | 1238 | | |
| Lime | 1238 | 1472 | | |
| Shale | 1472 | 1585 | | |
| \mathtt{Lime} | 1 58 5 | 1604 | | |
| Slate | 1604 | 1840 | | |
| Lime | 1840 | 1860 | | |
| Shale | 1860 | 2300 | | |
| Slate & Shells | 2300 | 2400 | | |
| Lime | 2400 | 2700 | | |
| Slate &Shells | 2700 | 3425 | ÷. | |
| Lime | 3425 | 3590 | | |
| Slate & Shells | 3590 | 3620 | | |
| Brown Shale | 3620 | 3850 | | |
| Black Slate | 3850 | 3900 | | |
| Lime | 3900 | 3930 | | |
| Dark Shale | 3930 | 4224 | | |
| Lime Tully Shale | 4224 | 4232 | | |
| Slate | 4232 4350 | 4350 | | |
| Shale | 4365 | 4365 4498 | | |
| Lime | 4498 | 4505 | | |
| Shale Gr | 450 5 | 4580 | | |
| Black Shale | 4580 | 4987 | | |
| Hard Shale Black | 4987 | 4990 | | |
| M.Shale | 4990 | 5180 | 5190 5 | -409 |
| Gritty Lime | 5180 | 5183 | 1934 | 924 |
| Brown Shale | 5183 | 5190 | Note the second | 137 |
| Corniferous Lime Gray | 5190 | 5212 | 5190 5 1934 -3256 -3 | 478 |
| Chert Gray | 5 212 | 5264 | | 7 13 |
| Corniferous Lime Shelly | 5264 | 5409 | | |
| Oriskany | 5409 | | | |
| Total Depth | | 5443 | • | |
| | | | | |

Gas 5245-5264 119 M Gas 5411-5432 4762MCF 3



J. Paul Martin No. 1(9208) Well.

Portland District, Preston County, W. Va. By Hope Natural Gas Company, Clarks burg, W. Va. Located 5.32 Mi. South of 39° 30' and 3.93 Mi. W. of 79° 30'. Kingwood Quadrangle - NE Elevation 1934' L. Permit - Preston No. 7. Drilling commenced March 27, 1948; completed September 25, 1948. Well was not shot. Gas Well; Volume 4,762,000 Cubic Feet. Rock pressure 2090 lbs. in 45 hours. Fresh water 45', hole full; 340', 3 bbls per hour. Salt water; none recorded. 16" casing, $19\frac{1}{8}$; 11", 331; 9", 1588; 7", 5085; all left in. No coal recorded. Section based on samples from 4208-54371.
Section based on samples from 4208-54371 examined by Russell R. Flowers Top Bottom Thickness 4208 Shale, grayish-black to black (highly carbonaceous) (interval corrected from 4238 to 4330), calcareous 4238 30 in part at the bottom Tully Limestone, 15 Feet. 4230 4245 15 Limestone, olive-gray to brownish-gray, very fine textured, shaly; a very large amount of dark-gray black shale, calcareous in part; the limestone is to probably not over half of this interval Hamilton and Marcellus shales, 937 feet. 4245 4285 40 Shale, dark-gray to grayis highlack 4285 4297 12 No sample 42.97 4310 Shale, medium dark gray to grayish-black, calcareous in part; small amount of pyrite 13 4310 4348 38 Shale, grayish-black, some dark-gray to grayishblack at the top 4348 4402 54 Shale, dark-gray to grayish-black, some grayish-black to black (carbonaceous); small amount of white vein calcite 4402 4462 60 Shale, mostly grayish-black 4462 4480 18 Shale, dark-gray, some grayish-black; small amount of olive-gray, shaly limestone at the bottom 4480 4523 43 Shale, dark-gray to grayish-black 4523 4675 152 Shale, mostly grayish-black 4675 4685 Shale, dark-gray to olive-black, slightly calcareous; small amount of olive-gray, very shaly lime-stone; some grayish-black shale 10

Shale, dark-gray to grayish- and olive-black

Shale, black (highly carbonaceous), grayish-black to black, pyritic; small amount of light gray, vein

some grayish-black at the top and 4756-4762!

Shale, grayish-black to black (highly carbonaceous),

calcite

4685

4690

5018

4690

5018

5050

5

328

32

| 5050 | 5065 | 15 | Shale, dark-gray to olive-black, calcareous; some dark-gray to grayish-black shale, calcareous in part |
|----------------------|---------------|----|---|
| 5065 | 5085 | 20 | Shale, grayish-black to brownish-black, highly calcareous |
| 5085 | 5111 | 26 | Shale, dark-gray to grayish-black, somewhat cal-careous, somewhat darker in color in the lower part |
| 5111 | 5135 | 24 | Shale, grayish-black to black (highly carbonaceous) some dark gray to, grayish-black |
| 5135 | 5176 | 41 | sk Shale, black, some grayish-black to black, very highly carbonaceous, highly calcareous in part, pyritic in part, many pieces of this shale show slickensides; some white to light-gray, vein valcite |
| 5176 | 5182 | 6 | Shale, black, some grayish-black to black, much of this shale is highly calcareous; a moderate amount of olive-black to brownish-black, shaly, highly micaceous siltstone (bentonite?) |
| | | | Huntersville Chert, 228 Feet. |
| 5182 1934 3148 | 5 2 08 | 26 | Limestone (very shaly) to shale (calcareous), grayish-black to black; small amount is siliceous to chert (shaly); a large amount of olive-black to brownish-black, highly micaceous, shaly siltstone (bentonite?) in the upper part; all of the samples contain large amounts of grayish-black to black shale (probably cavings); some grayish-black, glauconitic shale at the bottom |
| 5208 | 5223 | 15 | Chert, light-gray (transparent) to medium-gray (translucent), dark-gray to brownish and grayish-black (shaly), calcareous; a large amount of dark-gray to grayish-black shale at 5217-5219 |
| 5223 | 5226 | 3 | Chert, light- to medium-gray mottled with dark- gray to grayish-black shaly material, highly cal- careous, very highly calcareous at the top, some- what dolomitic |
| 5226 | 5234 | 8 | Chert, very light to medium-gray, translucent to opaque, calcareous, highly calcareous at the top, moderately dolomitic in the lower part |
| 5234 | 5235 | 1 | Chert, very light to medium light gray, somewhat calcareous and dolomitic |
| 5235 | 5239 | 4 | Chert, light- to medium-gray, translucent to dead; some dark-gray to grayish-black (shaly) in the upper part, somewhat calcareous and dolomitic |
| 5239 | 5243 | 4 | Chert, very light to medium light gray to trans- parent to translucent, mostly translucent at the top, slightly dolomitic, contains scattered siliceous sponge spacules (?) |
| 5243 | 5247 | 4 | Chert, very light to light-gray (with spots and streaks of dark-gray, shaly material), slightly dolomitic, mostly translucent, most of the chert contains siliceous (sponge?) spicules |
| 5247 | 5256 | 9 | Chert, light-to medium light gray mottled with dark-gray to grayish-black (shaly) material, transparent to opaque, slightly dolomitic, somewhat darker in color at 5254 to 5255', contains 4 large numbers of siliceous spicules (sponge spicules?) |

| ** | | | |
|--------------|-------------|------------|---|
| 5256 | 5262 | 6 | Chert, white (milky) to light-gray (translucent) mottled with dark-gray to grayish-black (very shaly, "dead"), slightly dolomitic, contains siliceous spicules (sponge spicules?) |
| 5262 | 5269 | 7 | with dark-gray to grayash-black very silty, shaly streaks, most of the chert contains siliceous sponge spicules (?); a very small amount of dolomite |
| 5269 | 5271 | 2 | Chert, medium light to medium dark gray (with dark- gray to grayish-black, shaly spots and streaks), contains siliceous sponge spicules (?) |
| 5271 | 5284 | 13 | Chert, light-to medium light gray (transparent to translucent) mottled with dark-gray to grayish-black (very shaly), contains many siliceous spicules ((sponge ?) thoughout this interval; a very small amount of dolomite |
| 5284 | 5286 | | Chert, medium- to dark-gray, translucent to "dead", silty; some dark-gray to grayish-black, very silty, shaly chert; a very small amount of dolomite |
| 528 6 | 5293 | 7 | Chert to siltstone, medium to medium dark gray and some dark-gray (very shaly), somewhat dolo-mitic; trace of glauconite |
| 5293 | 5298 | 5 | Chert, medium dark gray ("dead"), a large amount of dark-gray to grayish-black (very shaly), silty, highly glauconitie in part at the bottom; small amount of white dolomite |
| 52 98 | 5302 | . 4 | Chert, medium dark to dark-gray ("dead"), some light- to medium-gray (transparent), some dark-gray to grayish-black (very shaly), silty, small amount is dolomite |
| 5302 | 531.5 | 13 | Chert, medium dark gray (silty) to grayish-black (very shaly, silty), mostly dark-gray to grayish-black at the top |
| 5315 | 5317 | 2 | Chert (shaly) to shale (siliceous) grayish-black, some dark gray; small amount of medkum dark gray chest |
| 5317 | 5331 | 14 | Chert, medium-to medium dark gray, silty; some dark- gray to grayish-black, very shaly chert to siltstone |
| 5331 | 5343 | 12 | Chert, medium dark gray to dark-gray, a large amount of dark-gray to grayish-black (very shaly) |
| 5345 | 5350 | 7 | Chert, dark-gray to grayish-black, very shaly to siliceous shale; some medium dark gray chert |
| 5350 | 5360 | 10 | Chert, medium dark gray to a siliceous shale, grayish-black |
| 5360 | 5369 | 9 | Chert to siliceous shale, grayish-black |
| 5369 | 5382 | 13 | Shale, grayish-black, siliceous |
| 5382 | 5405 | 23 | Shale, grayish-black, some grayish-black to black; small amount of pyrite and white to light-gray vein |
| 5405 | 5410 | 5 | Limestone (very shaly) to calcareous shale, gray- ish-black; a large amount of brownish-black to gray- ish-black shale, sandy and glauconitic at the bottom |
| | | | |

Oriskany Sandstone, 27½ Feet.

| 5410 | 5414 | 4 | Sandstone, white to light-gray, fine- to medium- grained, some coarse grains, subrounded to rounded (mostly clear and glassy quartz) calcareous; the largest part of the sample of this interval is grayish-black shale |
|--------------|-------------------|-----|---|
| 5414 | 5425 | 11 | Sandstone, light-gray, very fine to fine-grained, subrounded, some medium to coarse rounded grains, calcareous |
| 5425 | 54 3 5 | 10 | San dstone, light-gray, very fine to medium grained, subrounded to rounded, highly calcareous |
| 5 435 | 5437 } | 212 | Sandstone, light-gray, broken too fine to describe in detail |
| | 5443 | | TOTAL DEPTH |

Portland Pistrict, Proston County, 7. Va.

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by Repo Netwol Cos Co., Clerksburg, V. Va.
Located 5.32 al. S. of 39" 30" and 3.93 ml. S. of 79° 30" - 85 - Singuood Cantrengia.
Elevation, 1976' L.
Pornit - Preston-7.
briling occurenced hereb 27, 1980; coupleted extember 25, 1945.
will one not shot.
See well; volume, 4.752.000 cm. ft.
Tech process, 2000 lbc. in 65 brs.
From unter, 65°, bole fall); 360°, 3 bbls. per hour.
nelt weter, nene recorded.
16° enoing, 195°: 11°, 301°: 9°, 1988°: 7°, 5085°; ell left in.
Do open paparana.
Cartion based on complex from 5250 to 55770; exemined by Careell S. Flavors.
Decord to NOT from Plowers May 2, 1951.
100. Dotto
      Potton. Thickness.
                          thele, grayion-blook to block (highly derbonecous) (interval
                    30
                             corrected from 4038 to 4230 tal, cleareous in part at the
                             hottou
                          Manatons, olive-gray to brownish-gray, very fine testared,
                   15
1070 = 1055
                             shalf a wary large abount of deris-gray to block shale,
                             delegrand in part; the limetone is probably not ever
                             bolf of this interval
                                 Determine one manufacture declare, 937 From
                          their, destaying to grayinh-block
4295 - 4295
BUDG a BUDG
                          Thele, median dork grey to provide blook, colearons in part;
4007 - 4330
                             positi secure of parito
                          Shale, grayish-block, men deringray to grayish-block at the top
                    地
botto - botto
                          thele, derh-grow to grayish-black, some grayish-block to black (cerbonasses); soull escent of white wain delette
1750 at $1000
                    多
                    80
                          thele, mostly propheted and
66930 a 66657
                          Shole, deployare, some project-block; small ascent of dive-
                    2.05
10062 m 10100
                   247
AND - ARTS
                          Thele, derivery to provide block
                          Chole, mostly graylab-black
6503 - 6675
6675 - 6685
                   152
                          Chole, derimproy to alive block, elightly delectores; seell
                             abount of olive-pray, very abely limetance more grayiab-
                             black shale
                           hale, derimpray to grayleb- and olive-block
4605 - 4690
                   325
                          Shake, grapinh-blook to blook (highly corbon-cooms), com-
1690 - 5010
                             grayion block at the top and by 5-2762*
                          Thele, block (highly explonaceous), grapish-block to block, specific small amount of light-oray vois calcite
5018 - 5050
                    32
                          thele, destroy to clive-block, colorecas; some deringray to
5050 - 5065
                    意想
                            menginhalinak meda, andar oma in part
                          holo, grayish-black to brownish-bloom, highly enlearance
9065 - 5085
                          Thele, desk-grey to grayich-block, account colorous, consulat
                    35
5005 - 5111
                             darker in color in the lover port
                          Chalm, grayich-blook to block (highly carbonasson); some derbe
                    234
5333 - 5135
                             gray to grayish-block to block, very highly carbona-
to, black, some grayish-block to block, very highly carbona-
cours, highly calcarages in part, pyritic in part, many
                    趣意
5335 - 5376
                              piness of this whole show elighenes doo; come white to
                             light-oney wein calcite
```

COVID, D. 2)

| | 200- | Botton. | | |
|-----------|----------|--------------|-------------|--|
| | | - 5182 | | the to, block, some grey tabablech to block, much of this shelf |
| | | | CONTRACT OF | is highly selectedun; a soderate amount of clive-block to |
| | | | | brownish-block, shely, highly atcaceous siltatone (beatonite); |
| | | | E - FONE | AUMOREVILLE CHOST, 208 FYOT |
| | 5102 | - 5208 | 26 | linestone (very shely) to shele (entergous), grayish-black to |
| | | | | block; shell sepant is ciliquose to chert (chely); a large |
| | | | | amount of olive-block to brownish-block, highly microsoms, |
| | | | | shaly elitations (bentomite) in the upper party all of the |
| | | | | sureles contain large amounts of grayith-black to black chale |
| | | -12-02 | | (probably cawings); some grayish-black, giousositie shale |
| | | | - | at the bottom |
| | 5203 | - 5223 | 15 | Chart, light-gray (transparent) to sedino-gray (translatent), |
| | | | | dark-gray to brownich and grayish-black (shely), enloarous; |
| | | | | a lerge meant of deriversy to grapish-black shale at 5:17- |
| | | | | 52291 |
| | 5223 | ≈ 5226 | 3 | Chort, light- to modius-gray, notiled with dark-gray to grayish- |
| | - | | Mar have | block shaly material, highly colourerss, very highly calca- |
| | | | | recas at the top, smewhat delectio |
| 1 - 1 - 1 | 5000 | - 5034 | | Churt, very light to medium-gray, translatent to opegar, calca- |
| | | | | rooms, highly extenseous at the top, mederately delecitie |
| | | | | in the lover part |
| | 5234 | - 5235 | 1 | there, very light to sed us light gray, sessioned telegrooms and |
| | | | 1 | dolonisio |
| | 5735 | - 5239 | 4 | thert, light- to notion-grey, translucent to "dead"; some derk- |
| | 1 151 | 14 A 14 | * LINES | gray to grayinh-linck (abely) in the upper part, secoular |
| - | | 3.4 | | enlowment and delemitie |
| * | 5239 | - 5:45 | 14 | Chort, way light to medica light gray to transperset to |
| | | | May King | translucant, mustly translucent at the top, alightly |
| | | The state of | | delemitie, mentalma menttered miliceous spange spicules (?) |
| | 5319 | - 5247 | 4 | Chart, very light to light-groy (with spate and stronks of deris- |
| | | | | gray, shuly meterial), alightly delesitie, mostly translament. |
| | | | | nost of the chert contains cilicous (sponse) spicules |
| | 5347 | - 5256 | 9 | Chart, light- to medium light gray, notiled with dark-gray to |
| | The Late | | 1 100 | grayinh block (wholy) material, transparent to opaque. |
| | | | | olightly colomitte, appended deriver in color of 5250 to |
| | | | | 52551, contains large members of eliceone epicales (e cage |
| | | | | maicales ?) |
| - | 5256 | - 5050 | 6 | Chart, white (milky) to light-gray (translatent), mottled with |
| | | | | deringray to provisi black (very shaly, "dead"), slightly |
| | | | | dalasitia, containe miliconas epicales (opengo mpicales ?) |
| | 5362 | - 5269 | 7 | dist, medius-gray (translatent to transperent), with deris-gray |
| | | | * | to graylish-block very cilty, shaly stracks, most of the chart |
| | | | | contains siliacons sponge spicales (?); a very small ascent |
| TO THE | | - | | of delecto |
| | 5269 | m 527% | 2 | thurt, medium light to medium derk gray (with derimeray to |
| | | | | graylah-black, shely spote and streets), contains silicooms |
| | - | No. 184 | | oponga spiculos (2) |
| | 9271 | - 500h | 13 | Churt, light- to medium light gray (premaperant to translacent). |
| | | | | motified with destroyery to grapish-black (very shely), contains |
| | | | | meny milicomes uploules (sponger) throughout this interval; |
| Y. | - | | | a vary smell amount of dolomite |
| | 5230 | - 5336 | 2 | Chort, madium to derberry, trenslatest to "deed", olity: |
| | | NE PERM | | come deale-spey to speytabelians, way allty, shaly short. |
| | 100 | | | a way small special of delocate |
| | | | | The state of the s |

(Continued on p. 3).

| | 1700* | | ant terr. | "his elemen | |
|---|--------------|------|------------|-------------|---|
| | 5236 | 105 | 5293 | 7 | chert to siltatone, median to median dark gary and some Cark- |
| | et netth | - | 5298 | 5 | Chart, madian dark gray ("doad"), a large energt of dark-gray |
| | 2422 | 100 | Subsec. | 100 | to originables (our shely), silty, highly glementite |
| | | | | | in rest at the lettery small amount of white delemate |
| | 5300 | 100 | 5302 | h | thart, notion dork to derk-grey ("doed"D, noon light- to |
| | | | | | median-gray (transparent), some derk-gray to grayish-block |
| | 1000 | | | 1 | (wory shaly), stlty, meall assent in Asients |
| | 5302 | 1928 | 5515 | 13 | thert, notion derk gray (silty) to grayich-black (very shaly, |
| | landing of | | - | | otity), monthy dust gray to grayish-blook at the top |
| | 5335 | 60 | 5317 | 2 | Chert (shely) to shelu (siliceous), grayish-black, some |
| | | | | - | deric-gray; medit conset of median dark gray chart |
| | 5387 | -000 | 2337 | 3/4 | thurt, modition to median dark gray, slity; some derk-gray |
| | 8190B | - | 5343 | 32 | Chart, medium derk gray to derk-gray, a large accent of derk- |
| | 237 | -000 | 3293 | 40.5 | are to gravish-block (very shely) |
| | entra | | 5350 | 19 | Mount, deckarpey to apopishablack, very shely to atlicages |
| | 3,743 | - | - | | olužo; sem medium derk eroy chark |
| | 5950 | 100 | 5350 | 10 | thort, median derk gray to a milloworm shale, graylah-black |
| | | | 5369 | 9 | thort to milimonan chale, propishablank |
| | | | 5302 | 23 | Oholo, grayish-block, milicoman |
| | 5382 | 1600 | 3405 | 27.3 | Thele, greyien-block, some greyish-block to block; weall |
| | | | orth trans | | mount of prite and white to light-pray vois coluite |
| | 5905 | 100 | 5010 | 5 | limentane (very shely) to colemnant shele, grayish-block; |
| | | | | | a large amount of brownish-black to grayish-black shale, |
| | | | | | nandym and glagmonitie at the bottom |
| | and the same | | 5616 | - | condutons, white to light-ory, from time- to median-grained, |
| | The state of | 1000 | Date grant | - 1 | some cover grains, subrounded to rounded (costly clour |
| | 1.194 | | | | and glossy quarks), colouroous; the largest part of the |
| | | | | | neeple of this interval is graylob-block shale |
| | 5030 | - | 5025 | 11 | Fundators, lightworry, very fine to fine-grained, extrounded, |
| | | | | | come mediam to course rounded grains, colearaum |
| | 5000 | 20% | 9935 | 10 | Sendatona, light-grey, very fine to sedima-grained, cab- |
| | | | | | rounded to rounded, highly relograces |
| | 5435 | -68 | 50370 | 20 | Sondatone, light-grow, broken too fine to describe in detail |
| Ī | | | 5943 | | Total dapth |
| | | | | | |

FORM WW-2B AUG 0 7

Page 1 of 1

STATE OF WEST VIRGINIA EXPLAND 9/2/94

DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

WELL WORK PERMIT APPLICATION

| | | | MELL WO | | APPLICATIO | <u>N</u> | |
|-----|-----------------|-----------|--------------------------------------|-------------------|---------------------|--|----------------------|
| | 1) Well Op | erator:_ | COLUMBIA | GAS TRANSM | ISSION CORP. | 10450 (5) | 636 |
| | 2) Operato | r's Well | Number: | 7387 | | 3) Ele | vation: <u>1934</u> |
| | 4) Well ty | pe: (a) | 0il_/ | or Gas | s <u>x</u> / | | |
| | | (b) | If Gas: | Production | n/ Underg | round Storage | |
| | 5) Propose | d Target | Pormatica | νee | p <u>x</u> / 475 | Shallow | '/ |
| | • | | | 72 · | Oriskany Sands | tone . | |
| | - | | | | , | | |
| | •• | | | | ths: unknow | | |
| | | | | | 1100' | (est.) | |
| | | | | | none | | |
| | | | | · | | ive mine? Ye | |
| | | d Well Wo | | | | re or improve de | |
| | 12) | | CASIN | G AND TUB | ING PROGRAM | THE NAME OF THE PARTY OF THE PA | • |
| | TYPE | <u> </u> | PECIFICAT | IONS | FOOTAGE I | NTERVALS | CEMENT |
| | | Size | Grade | Weight per ft. | For drilling | Left in | Fill-up (cu. ft.) |
| | Conductor | | | , | - XXX ROLD | | • |
| | Fresh Water | 11-3/4" | - | - CAR | 331 | 331' | unk. |
| 7 | Coal | | | Yes | Nu | | |
| \$ | Intermediate | 7" | N | 23 | 4799' | 4799' | 300 sx. |
| 76 | Production_ | 4-1/2" | J | 12.6 | - | 54721 | 110 sx. |
| | Tubing | | | | | | • |
| | Liners | | | | | | |
| | PACKERS : Kin | | none | | | | |
| | | ths set | ···································· | | | | |
| | 053 | F | or Diviso | n of Oil a | ind Cas Use | Only | 7- |
| 001 | 8)53 8 _ 3 | aid: |) 21 We)11 W | ork Permit | I Rec | lamation Fund | WPCP |
| | Plat Plat | WW-9 & | Ww- | 2B | sond fun | t Blinky | Agent |
| | | • | | | , | (Type) | |