



STATE OF WEST VIRGINIA DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

| Quadra | ngle_ | Cottageville |
|--------|-------|--------------|
| Permit | No | JAC-1444 · W |

| Rotary_XXX | Oil |
|-------------|---------|
| Cable | Gas_XXX |
| Recycling | Comb |
| Water Flood | Storage |
| Disposal | (Vind) |

| | | | | VICING) |
|---|------------------------------|---------------------|-----------------|----------------------------------|
| Company DEVON CORPORATION Address Box 1433, Charleston, W. Va. Farm Freda Batten Acres 111 ac | Casing and Tubing | Used in Drilling | Left in Well | Cement fill up Cu. ft. (Sks.) |
| Location (waters) Mill Creek Well No. 907 Elev. 765 District Ripley County Jackson | Size 20-16 Cond. | | | |
| The surface of tract is owned in fee by | 13-10" 9 5/8 8 5/8 | 243 | 243 | 100 sax=to surf |
| Mineral rights are owned by Freda Batten 513 N. Ritchie, Ravenswood | $\frac{6.5/8}{7}$ | 2482 | 2482 | 75 sax=625' |
| Drilling Commenced December 6, 1978 W. VA. Drilling Completed December 13, 1978 | 4 1/2 | | 4846 | 200 sax=2400' |
| Initial open flow 20 MCFD XXXXXX bbls. Final production 150 MCFC. ft. per day bbls. Well open 4 hrs. before test 1380 RP. | 2 Liners Used | | 3847 | * |
| Well treatment details: Perforated $4\frac{1}{2}$ " casing 4786' to 4788' w | Attach copy of ith 16 shots. | | ord. | |
| Frac Oriskany Sand with 1000 gallons HG 5/5/1980 Oriskany is not commercial. S | | | | |

Frac Oriskany Sand with 1000 gallons HCL, 905 BBLS water and 43,500# sand.

5/5/1980 Oriskany is not commercial. Set bridge plug at 4125' with 10' calseal plug on top. Perf 3835 to 4028 with 25 shots. Frac Brown Shale w/270 bbls water & 60,000# sand. OF=75MCFD RP=620 PSI in 12 hrs.

Coal was encountered at None reported Feet Inches

Fresh water Feet Salt Water Feet

Producing Sand Oriskany Sand Depth 4786-4788

| Formation | Color | Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water * Remarks |
|--|-------|--------------|--|---|--|
| Surface Sand Shale Sand | | | 0 13 40 90 116 222 270 420 440 570 588 652 673 726 748 866 883 908 918 940 958 1044 1194 1250 | 13 40 90 116 222 270 420 440 570 588 652 673 726 748 866 883 908 918 940 958 1044 1194 1250 1366 | APR 5 - 1982 OIL AND GAS DIVISION WY DEPARTMENT OF MINES |

(over)

^{*} Indicates Electric Log tops in the remarks section.

| Formation Color Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water | * Remarks |
|---|--|--|-------------------|---------------------------------------|
| Shale Sand Shale Sand Shale Sand Shale Maxon Sand Big Lime Shale Injun Sand Shale Coffee Shale Berea Sand Shale Brown Shale Brown Shale Shale Onondaga L. S. Oriskany Sand Helderberg L. S. Log Total Depth | 1366 1402 1440 1586 1593 1700 1774 1878 1920 2037 2348 2371 2375 3571 4066 4475 4665 4748 4794 | 1402 1440 1586 1593 1700 1774 1878 1920 2037 2348 2371 2375 3571 4066 4475 4665 4748 4794 4864 | | |
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| Date | January 8, | 10,79 |
|----------|--------------------|--|
| | DEVON CORPORATION | 10 0 10 0 10 0 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| APPROVED | A. C. Youse | Owner. |
| Ву | District Geologist | |
| | (little) | |



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

SEP - 4 1979
47-035-1444

OIL & GAS DIVISION
DEPT. OF MINES

| Quadrangle(| Cottagevi | 11e | | RECORD | 18 | Cable | The second secon |
|---|--|--|--|--|--|--|---|
| Permit No. | | | | | | | Comb Storage |
| Permit No. | KARA B. A. A. A. | | | | | | |
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| Address-Some | LIGHT Patt | harleston. | | 700 | Drilling | 1 | Cu. ft. (Sks.) |
| The second secon | cua patt | 1 (v o o l | Acres III ac | | | No. 2004-100-100-100-100-100-100-100-100-100- | |
| Location (water | 75) | ; C1 & CV | | Size | andonanical | THE STATE OF THE S | 20 (1988) |
| Well No. | <u>V</u> Iinlev | County | Elev <u>. 199</u> Jackson | 20-16 | SCHOOL STATE OF STATE | | |
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| FOIDSTON | Color | Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or | Water | * Remarks |
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| Sand | | | 652 | 673 | | | |
| Shale | | | 673 | 726 | | | |
| Sand | | | 726 | 748 | | | |
| Shale | | | 748 | 866 | | | |
| Sand Shale | | | 866 | 883 | | | |
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| Shale | | | 958 | 1044 | | | |
| Sand | | | 1044 | 1194 | | | |
| Shale Sand | | | 1194 1250 | 1250 1366 | | | A Section 1 |

⁽over)

^{*} Indicates Electric Log tops in the remarks section.

47-035-1444

| Formation Color Hard or Soft | Top Feet /3 | Bottom Feet | Oil. Gas or Water * Remarks |
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| Shale Sand Shale Sand Shale Maxon Sand Big Lime Shale Injun Sand Shale Coffee Shale Berea Sand Shale Brown Shale Brown Shale Onondaga L. S. Oriskany Sand Helderberg L. S. Log Total Depth | 1366 1402 1440 1586 1593 1700 1774 1878 1920 2037 2348 2371 2375 3571 4066 4475 4665 4794 | 1402 1440 1586 1593 1700 1774 1878 1920 2037 2348 2371 2375 3571 4066 4475 4665 4748 4794 4864 | |
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Date January 8, 10,79

EVON CORPORATION

A. C. Youse

By District Geologist

(Lule)





OIL & GAS DIVISION DEFT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

| TO THE DEPARTMENT OF MINES, | |
|---|---|
| Charleston, W. Va. | DATE MAY 8, 1978 |
| Surface Owner William C. & Arlene B. Kuryla | Company DEVON CORPORATION |
| Address 113 Chiles St., St. Albans, W. Va. | |
| Mineral Owner Freda Batten, et al | Farm Freda Batten Acres 111.50 ac |
| Address 513 N. Ritchie, Ravenswood, WV | Location (waters) Mill Creek |
| Coal Owner Same as above | Well No. 907 Elevation 765 |
| Address | District Ripley County Jackson |
| Coal Operator Not operated | |
| Address | |
| HIS PERMIT MUST BE POSTED AT THE WELL SITE | |
| provisions being in accordance with Chapter 22, | |
| the W. Va. Code, the location is hereby approved drilling. This permit shall expire if | INSPECTOR Richard J. Morris TO BE NOTIFIED |
| erations have not commenced by 10-1-78 | ADDRESS P.O. Box 372, Grantsville, W.Va. |
| Tobush was | PHONE 354-7259 |
| Deputy Director - Oil & Gas Division GENTLEMEN: | PHONE |
| | he above named farm or tract of land for oil and gas, having fee |
| made to Commonwealth Gas 19 in Jackson County, Book 115 XXX NEW WELL DRILL DEEPER | |
| | |
| OIL AND GAS WELL ORIGINALLY DRILLI The enclosed plat was prepared by a registered engineer | |
| OIL AND GAS WELL ORIGINALLY DRILLI The enclosed plat was prepared by a registered engineer have been notified as of the above date. The above named coal owners and/or operator are hereby | or licensed land surveyor and all coal owners and/or operators |
| OIL AND GAS WELL ORIGINALLY DRILLI The enclosed plat was prepared by a registered engineer have been notified as of the above date. The above named coal owners and/or operator are hereby to make by Section 3 of the Code, must be received by, or Copies of this notice and the enclosed plat were mailed by | or licensed land surveyor and all coal owners and/or operators y notified that any objection they wish to make, or are required filed with the Department of Mines within ten (10) days. * by registered mail, or delivered to the above named coal operators day hefore, or on the |
| OIL AND GAS WELL ORIGINALLY DRILLIAND The enclosed plat was prepared by a registered engineer have been notified as of the above date. The above named coal owners and/or operator are hereby to make by Section 3 of the Code, must be received by, or Copies of this notice and the enclosed plat were mailed by the coal owners at their above shown respective address—same day with the mailing or delivery of this copy to the Delivery of the Delivery of this copy to the Delivery of this copy to the Delivery of the Delivery of the Delivery of this copy to the Delivery of the Delivery of this copy to the Delivery of the Delivery | or licensed land surveyor and all coal owners and/or operators y notified that any objection they wish to make, or are required filed with the Department of Mines within ten (10) days. * by registered mail, or delivered to the above named coal operators day |
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| The enclosed plat was prepared by a registered engineer have been notified as of the above date. The above named coal owners and/or operator are hereby to make by Section 3 of the Code, must be received by, or Copies of this notice and the enclosed plat were mailed by the coal owners at their above shown respective address—same day with the mailing or delivery of this copy to the Delease Submit copies of All GEOPHYSICAL LOGS DIRECTLY TO: | or licensed land surveyor and all coal owners and/or operators y notified that any objection they wish to make, or are required filed with the Department of Mines within ten (10) days. * by registered mail, or delivered to the above named coal operators day |
| The enclosed plat was prepared by a registered engineer have been notified as of the above date. The above named coal owners and/or operator are hereby to make by Section 3 of the Code, must be received by, or Copies of this notice and the enclosed plat were mailed by the coal owners at their above shown respective address—same day with the mailing or delivery of this copy to the Delease Submit copies of All GEOPHYSICAL LOGS DIRECTLY TO: WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY Address Address Address Address O. BOX 879 | or licensed land surveyor and all coal owners and/or operators y notified that any objection they wish to make, or are required filed with the Department of Mines within ten (10) days. * Department of Mines at Charleston, West Virginia. Very truly yours, DEVON CORPORATION (Sign Name) A. C. Youse, Nist. Geologist PO Box 1433 Street Charleston. |
| The enclosed plat was prepared by a registered engineer have been notified as of the above date. The above named coal owners and/or operator are hereby to make by Section 3 of the Code, must be received by, or Copies of this notice and the enclosed plat were mailed by or coal owners at their above shown respective address—same day with the mailing or delivery of this copy to the Delease Submit copies of All Geophysical logs directly to: WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY P. O. BOX 879 MORGANTOWN, WEST VIRGINIA 26505 | or licensed land surveyor and all coal owners and/or operators y notified that any objection they wish to make, or are required filed with the Department of Mines within ten (10) days. * Dy registered mail, or delivered to the above named coal operators day before, or on the Department of Mines at Charleston, West Virginia. Very truly yours, DEVON CORPORATION (Sign Name) Well Operator Geologist PO Box 1433 Street Charleston, erator |
| The enclosed plat was prepared by a registered engineer have been notified as of the above date. The above named coal owners and/or operator are hereby to make by Section 3 of the Code, must be received by, or Copies of this notice and the enclosed plat were mailed by or coal owners at their above shown respective address—same day with the mailing or delivery of this copy to the DEPLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO: WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY Address Address P. O. BOX 879 | or licensed land surveyor and all coal owners and/or operators y notified that any objection they wish to make, or are required filed with the Department of Mines within ten (10) days. * Department of Mines at Charleston, West Virginia. Very truly yours, DEVON CORPORATION (Sign Name) A. C. Youse, Nist. Geologist PO Box 1433 Street Charleston. |

*SECTION 3.... If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

JAC=1444
______PERMIT NUMBER
47=035

Y

THIS IS AN ESTIMATE ONLY ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

| PROPOSED WORK ORDER TO | XXX | TIPPOPI T | TO A COUNTY OF THE COUNTY ASSESSMENT | | |
|--------------------------------------|---|--|--|--|--|
| DRILLING CONTRACTOR: (If | | RESPONSIBLE AGENT: | | | |
| NAME FWA Drilling C | | NAME Bill Endicott ADDRESS Box 1433, Charleston, W. Va. | | | |
| ADDRESS Box 448, Elkvi | | | | | |
| TELEPHONE 965-3379 | | | | | |
| ESTIMATED DEPTH OF COMPL | | | CABLE TOOLS | | |
| PROPOSED GEOLOGICAL FORM | | | CABLE TOOLS | | |
| TYPE OF WELL: OIL_ | | | DIODOCA I | | |
| | | | OODOTHER | | |
| | 1100102 | WAIER FLO | OTHER | | |
| TENTATIVE CASING PROGRAM | : | | | | |
| | | | | | |
| CASING AND TUBING SIZE | USED FOR | LEFT IN | CEMENT FILL UP | | |
| 20 - 16 | DRILLING | WELL | OR SACKS - CUBIC FT. | | |
| 13 - 10 | | | | | |
| 9 - 5/8 | 250 | 250 | 100 sax=to surface | | |
| 8 - 5/8 | 200 | 230 | 100 Sax-to Surface | | |
| 7 | 2500 | 2500 | 75 sax=625' | | |
| 5 1/2 | | 1000 | 7 3 3 4 X 0 2 3 | | |
| 4 1/2 | | 4950 | 150 sax=1800 | | |
| 3 | | | | | |
| 2 | | | Perf. Fop Perf. Bottom | | |
| Liners | | | Perf. Top | | |
| | | | Perf. Bottom | | |
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| APPROXIMATE COAL DEPTHS_ | None anticipat | ed | PEE1 | | |
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| ING ORIGINAL PERIMIT NOW | IBER, AND PERFORMANCE | BOND. | | | |
| Required forms must be filed | within ninety (90) days of | completion for bond release. | Inspector to be notified twenty- | | |
| four (24) hours in advance. | | | and the state of t | | |
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| The following waiver must be nereof. | completed by the coal ope | erator if the permit is to be i | ssued within ten days of receipt | | |
| | | | | | |
| VAIVER: I the undersigned, Agent | . for | Coal Company, Owner | or Operator of the coal under | | |
| this lease have examined | and place on our mine m | aps this proposed well locati | on. | | |
| We the | Coal Company | have no objections to said we | ell being drilled at this location, | | |
| providing operator has co | mplied with all rules and reg | ulations in Articles 4, 5, and 7 | ', Chapter 22 of the West Virginia | | |
| Code. | Ç | ., ., | , or the frest vingilia | | |
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| | | Fo | r Coal Company | | |
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| | | | Official Title | | |